

B

BAB250 CAS: 37661-08-8 HR: 3

BACAMPICILLIN HYDROCHLORIDE

mf: $C_{21}H_{27}N_3O_7S \cdot ClH$ mw: 502.03

PROP: Crystals from Me_2CO pet ether. Mp: 171–176° (decomp).

SYNS: AMBACAMP □ BACACIL □ BAPC □ BECAMPICILLIN □ CAMBAXIN □ PENGLOBE □ SPECTROBID

TOXICITY DATA with REFERENCE:

ivn-rat LD50:176 mg/kg NIIRDN 6,575,82
 orl-mus LD50:8529 mg/kg NKRZAZ 27(Suppl 4),17,79
 ipr-mus LD50:176 mg/kg NKRZAZ 27(Suppl 4),17,79
 scu-mus LD50:9475 mg/kg NKRZAZ 27(Suppl 4),17,79
 ivn-mus LD50:184 mg/kg NKRZAZ 27(Suppl 4),17,79

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Mildly toxic by ingestion and subcutaneous routes. When heated to decomposition it emits very toxic fumes of NO_x , SO_x , and HCl .

BAB625 CAS: 70458-96-7 HR: 3

BACCIDAL

mf: $C_{16}H_{18}FN_5O_3$ mw: 319.37

PROP: Crystals from methylene chloride/methanol. Mp: 227–228°. Hygroscopic in air, forms a hemihydrate.

SYNS: AM-715 □ BARAZAN □ 1,4-DIHYDRO-1-ETHYL-6-FLUORO-4-OXO-7-(1-PIPERAZINYL)-3-

QUINOLINECARBOXYLIC ACID □ 1-ETHYL-6-FLUORO-1,4-

DIHYDRO-4-OXO-7-(1-PIPERAZINYL)-3-

QUINOLINECARBOXYLIC ACID □ MK-366 □ NORFLOXACIN

TOXICITY DATA with REFERENCE:

dnr-bcs 62,500 $\mu g/L$ NKRZAZ 29(Suppl 4),938,81
 orl-mus TDLo:1250 mg/kg (female 6-15D post):REP
 NKRZAZ 29(Suppl 4),895,81
 orl-rbt TDLo:1300 mg/kg (female 6-18D post):TER
 FAATDF 7,272,86
 orl-man TDLo:94 mg/kg/13D-I:MSK NZMJAX
 96,590,83

ivn-rat LD50:245 mg/kg NKRZAZ 29(Suppl 4),766,81
 orl-mus LD50:4 g/kg JMCMAR 30,2163,87
 ivn-mus LD50:220 mg/kg NKRZAZ 29(Suppl 4),766,81
 ims-mus LD50:470 mg/kg NKRZAZ 29(Suppl 4),766,81

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by other routes. Human systemic effects by ingestion: musculoskeletal changes. An experimental teratogen. Other experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of F^- and NO_x .

BAB650 HR: 3

BACILLUS CEREUS exo-ENTEROTOXIN

TOXICITY DATA with REFERENCE:

ivn-mus LDLo:15 mg/kg APMBAY 29,201,75
 par-mus LDLo:14 mg/kg BIORAK 38,113,73
 ivn-rbt LDLo:3 mg/kg BEXBAN 73,78,72

SAFETY PROFILE: Poison by intravenous and parenteral routes.

BAB700 HR: 2

BACILLUS Sp. No. 21 POLYSACCHARIDE

TOXICITY DATA with REFERENCE:

ims-mus LD50:500 mg/kg ABCHA6 38,1407,74

SAFETY PROFILE: Moderately toxic by intramuscular route. When heated to decomposition it emits acrid smoke and irritating vapors.

BAB750 CAS: 1395-21-7 HR: 3

BACILLUS SUBTILIS BPN

PROP: A commercial raw proteolytic enzyme used in laundry detergents (FCTXAV 7,581,69).

SYNS: BACILLOMYCIN (8CI, 9CI) □ BACILLOMYCIN R □ FUNGOCIN □ SUBTILISINS (ACGIH) □ SUBTILISINS BPN

TOXICITY DATA with REFERENCE:

eye-rbt 3 mg SEV FCTXAV 7,581,69
 ipr-mus LD50:75 mg/kg 85ERAY 3,1606,78

OSHA PEL: CL 0.00006 mg/m^3

ACGIH TLV: CL 0.00006 mg/m^3

SAFETY PROFILE: A poison via intraperitoneal route. A severe eye irritant. When heated to decomposition it emits toxic fumes of NO_x .

BAC000 CAS: 9014-01-1 HR: 3

BACILLUS SUBTILIS CARLSBERG

PROP: A commercial raw proteolytic enzyme used in laundry detergents (FCTXAV 7,581,69).

SYNS: ALCALASE □ ALK-ENZYME □ BACILLOPEPTIDASE A □ BACILLOPEPTIDASE B □ BIOPRASE □ COLISTINASE □ E.C. 3.4.4.16 □ E.C. 3.4.21.14 □ MAXATASE □ NAGARSE □ SUBTILISIN (9CI, ACGIH) □ SUBTILISIN CARLSBURG □ SUBTILISIN NOVO □ SUBILOPEPTIDASE A □ SUBILOPEPTIDASE B □ SUBILOPEPTIDASE BPN' □ SUBILOPEPTIDASE C □ THERMOASE PC-10

TOXICITY DATA with REFERENCE:

eye-rbt 3 mg MOD FCTXAV 7,581,69
 orl-rat LD50:3700 mg/kg FCTXAV 7,581,69

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

ACGIH TLV: CL 0.00006 mg/m^3

SAFETY PROFILE: Moderately toxic by ingestion. An eye irritant. When heated to decomposition it emits toxic fumes of NO_x .

BAC020 CAS: 9001-92-7 HR: 3

BACILLUS SUBTILIS NEUTRAL PROTEASE

SYNS: A.S. 1.398 □ PROTEASE, BACILLUS SUBTILIS NEUTRAL

TOXICITY DATA with REFERENCE:

ipr-mus LD50:45 mg/kg CYLPDN 4,214,83

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits acrid smoke and irritating vapors.

BAC040 CAS: 68038-71-1 HR: 1

BACILLUS THURINGIENSIS

PROP: Light reddish-brown suspension concentrate in water with fishy odor. D.09 mg/ml, bp: 100°. Non-flammable.

SYNS: AGRITOL □ BACILLUS THURINGENSIS □ BACILLUS THURINGIENSIS BERLINER □ BACTOSPEIN □ BACTUCIDE □ BACTUR □ BAKTHANE □ BERLINER □ BIOTROL □ BITOKSYBACILLIN □ BTB □ BTB 202 □ CAJRAB □ DIPEL □ GOMELIN □ LARVATROL □ MEGA BT □ SAN 239 □ THURICIDE □ THURINGIN

TOXICITY DATA with REFERENCE:

orl-rat LD50:>20 g/kg SPEADM 78-1,11,78

skn-rat LD50:>5 g/kg PEMNDP 9,49,91

skn-rbt LD50:>20 g/kg SPEADM 78-1,11,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low toxicity by ingestion and skin contact. When heated to decomposition it emits acrid smoke and irritating vapors.

BAC125 CAS: 23526-02-5 HR: 3

BACILLUS THURINGIENSIS EXOTOXIN

SYNS: EXOTOXIN □ β-EXOTOXIN (BACILLUS THURINGIENSIS) □ THURINGIENSIN □ THURINGIENSIN A □ THURINTOX □ TURINGIN-1

TOXICITY DATA with REFERENCE:

sln-dmg-orl 1 pph HEREAY 85,113,77

cyt-hmn:leu 20 pph HEREAY 85,105,77

cyt-rat-orl 4500 g/kg/90D-C HEREAY 85,105,77

ivn-rat LD50:>300 mg/kg NYKZAU 77(3),1P-36P,81

unr-rat LD50:390 mg/kg GISAAA 55(6),86,90

unr-mus LD50:672 mg/kg GISAAA 55(6),86,90

unr-rbt LD50:300 mg/kg GISAAA 55(6),86,90

unr-gpg LD50:175 mg/kg GISAAA 55(6),86,90

SAFETY PROFILE: Poison by unreported routes. Human mutation data reported.

BAC130 HR: 1
BACILLUS THURINGIENSIS var. ISRAELENSIS

SYN: GNATROL

TOXICITY DATA with REFERENCE:

orl-rat LD50:>5 g/kg FMCHA2 -,C155,91

orl-rbt LD50:>2 g/kg FMCHA2 -,C155,91

SAFETY PROFILE: Low toxicity by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BAC135 HR: 3

BACILLUS THURINGIENSIS subsp.

ISRAELENSIS POLYPEPTIDE crystal

SYN: POLYPEPTIDE, BACILLUS THURINGIENSIS subsp. ISRAELENSIS, crystal preparation

TOXICITY DATA with REFERENCE:

ipr-mus LD50:770 µg/kg FAATDF 13,310,89

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits acrid smoke and irritating vapors.

BAC140 HR: 3
BACILLUS THURINGIENSIS MORRISONI
EXOTOXIN

SYN: EXOTOXIN, BACILLUS THURINGIENSIS MORRISONI

TOXICITY DATA with REFERENCE:

scu-mus LD50:136 mg/kg JEENAI 78,613,85

SAFETY PROFILE: A poison by subcutaneous route. When heated to decomposition it emits acrid smoke and irritating vapors.

BAC175 CAS: 29393-20-2 HR: 2

BACILYSIN

mf: C₁₂H₁₈N₂O₅ mw: 270.32

PROP: Amorphous solid.

SYNS: N-1-ALANYL-3-(5-OXO-7-OXABICYCLO(4.1.0)HEPT-2-YL)-L-ALANINE □ α-(2-AMINO-1-OXOPROPYL)AMINO)-5-OXO-7-OXABICYCLO(4.1.0)HEPTANE-2-PROPANOIC ACID □ α-(2-AMINOPROPIONAMIDO)-5-OXO-7-OXABICYCLO(4.1.0)HEPTANE-2-PROPIONIC ACID □ ANTIBIOTIC KM 208 □ BACILLIN □ KM-208 □ TETAINE

TOXICITY DATA with REFERENCE:

dni-hmn:hla 320 µmol/L BBACAQ 825,199,85

oms-hmn:hla 150 µmol/L BBACAQ 825,199,85

ivn-mus LD50:450 mg/kg 85GDA2 4(1),221,80

SAFETY PROFILE: Moderately toxic by intravenous route. Human mutation data reported. When heated to decomposition it emits toxic fumes of NO_x. An antibiotic.

BAC250 CAS: 1405-87-4 HR: 3

BACITRACIN

PROP: White to pale-buff, hygroscopic powder; odorless or slt odor. Freely sol in water, alc, methanol, and glacial acetic acid; insol in acetone, chloroform, and ether. When heated to decomposition it emits acrid smoke and irritating fumes.

SYNS: AYFIVIN □ BACIGUENT □ BACI-JEL □ BACILQUIN □ BACITEK OINTMENT □ FORTRACIN □ PARENTRACIN □ PENITRACIN □ TOPITRACIN □ USAF CB-7 □ ZUTRACIN

TOXICITY DATA with REFERENCE:

dnd-esc 5 µmol/L MUREAV 89,95,81

ipr-rat LD50:190 mg/kg PSEBAA 64,503,47

ipr-mus LD50:300 mg/kg NTIS** AD277-689

scu-mus LDLo:1300 mg/kg PSEBAA 64,503,47

ivn-mus LD50:360 mg/kg PSEBAA 64,503,47

orl-gpg LD50:2 g/kg ANTCAO 4,304,54

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion and subcutaneous routes. Mutation data reported.

BAC260 CAS: 55852-84-1 HR: 1

BACITRACIN METHYLENE DISALICYLATE

PROP: White to brownish-gray powder. Disagreeable odor. Sol in water, pyridine, ethanol; less sol in acetone, ether, chloroform, pentane, benzene.

SYNS: BMD □ FORTRACIN (BACITRACIN-MD) □ KEMITRACIN 10 □ MD BACITRACIN

TOXICITY DATA with REFERENCE:

orl-rat LD50:>10 g/kg ANTCAO 4,304,54

orl-gpg LD50:2 g/kg ANTCAO 4,304,54

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low oral toxicity. When heated to decomposition it emits acrid smoke and irritating fumes.

BAC265

HR: D

BACITRACIN ZINC

SAFETY PROFILE: When heated to decomposition it emits acrid smoke and irritating fumes.

BAC275

CAS: 1134-47-0

HR: 3

BACLOFEN

mf: C₁₀H₁₂ClNO₂ mw: 213.68

PROP: Crystals from water. Mp: 206–208°.

SYNS: β-(AMINOMETHYL)-4-CHLORO BENZENEPROPANOIC ACID □ β-(AMINOMETHYL)-p-CHLORO HYDROCINNAMIC ACID □ γ-AMINO-β-(p-CHLOROPHENYL)BUTYRIC ACID □ Ba 34647 □ BACLON □ C 34647Ba □ β-(p-CHLOROPHENYL)-γ-AMINO BUTYRIC ACID □ β-(4-CHLOROPHENYL)GABA □ CIBA 34,647-Ba □ LIORESAL

TOXICITY DATA with REFERENCE:

orl-wmn TDLo:18 mg/kg:CNS,PUL JTCTDW 22,11,84

orl-man TDLo:14 mg/kg:BAH JTCTDW 20,59,83

orl-man TDLo:4286 µg/kg:BAH,CVS AJEMEN 4,552,86

orl-rat LD50:145 mg/kg NIIRDN 6,576,82

scu-rat LD50:115 mg/kg IYKEDH 11,181,80

ivn-rat LD50:78 mg/kg IYKEDH 11,181,80

orl-mus LD50:200 mg/kg NIIRDN 6,576,82

scu-mus LD50:103 mg/kg IYKEDH 11,181,80

ivn-mus LD50:31 mg/kg YKYUA6 31,871,80

SAFETY PROFILE: Poison by ingestion, subcutaneous and intravenous routes. Human systemic effects by ingestion: blood pressure lowering, coma, muscle weakness, pulse rate decrease, respiratory depression. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x. A muscle relaxant.

BAC325

CAS: 50846-45-2

HR: D

BACMECILLINAM

mf: C₂₀H₃₁N₃O₆S mw: 441.54

PROP: Oil.

SYNS: (2S-(2-α,5-α,6-β))-6-(((HEXAHYDRO-1H-AZEPIN-1-YL)METHYLENE)AMINO)-3,3-DIMETHYL-7-OXO-4-THIA-1-AZABICYCLO(3.2.0)HEPTANE-2-CARBOXYLIC ACID 1-((ETHOXYCARBONYL)OXY)ETHYL ESTER □ KW-1100

SAFETY PROFILE: An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of SO_x and NO_x.

BAC390

HR: D

BACTERIOIDES FRAGILIS ENDOTOXIN

SYN: ENDOTOXIN, BACTERIOIDES FRAGILIS

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating vapors.

BAC400

HR: 3

BACTERIOIDES FRAGILIS ENDOTOXIN, EXTRACTS

PROP: Phenol-water extracts from BACTERIOIDES FRAGILIS 62/73 strain. BAPBAN 26,19,78

TOXICITY DATA with REFERENCE:

ivn-mus LD50:38 mg/kg BAPBAN 26(1),19,78

ivn-rbt LDLo:2 mg/kg BAPBAN 26(1),19,78

idr-rbt LDLo:500 µg/kg BAPBAN 26(1),19,78

SAFETY PROFILE: A poison by intravenous and intradermal routes. When heated to decomposition it emits acrid smoke and irritating vapors.

BAD000

CAS: 64550-80-7

HR: 2

BA-10,11-DIOL-8,9-EPOXIDE-1

mf: C₁₈H₁₄O₃ mw: 278.32

SYN: 8,9,10,11-TETRAHYDRO-10,11-DIHYDROXY-8-α,9-α-EPOXYBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

skn-mus TDLo:22 mg/kg:ETA CNREA8 38,1699,78

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BAD250

HR: 1

BAGASSE DUST

SAFETY PROFILE: A nuisance dust from the fibrous residue of cane sugar manufacture. Inhalation can cause bronchial asthma, sneezing, rhinorrhea, pneumonitis, etc. See also COTTON DUST. Fire and explosion hazard when exposed to heat, flame, or oxidizers.

BAD300

CAS: 93165-85-6

HR: 3

BAISA, EXTRACT

SYNS: SALIX TETRA-SPRA ROXB., EXTRACT □ BAISHI, EXTRACT

TOXICITY DATA with REFERENCE:

ipr-rat LD50:1 g/kg IJEBAG 16,228,78

ipr-mus LD50:1 g/kg IJEBAG 9,91,71

orl-rbt LDLo:50 mg/kg JRIMAO 6,112,71

SAFETY PROFILE: A poison by ingestion. Moderately toxic by intraperitoneal route. When heated to decomposition it emits acrid smoke and irritating vapors.

BAD400

HR: D

BAKERS YEAST EXTRACT

PROP: From ruptured cells of *Saccharomyces cerevisiae*. Liquid, paste or powder. Water sol.

SYNS: AUTOLYZED YEAST EXTRACT □ BAKERS YEAST GLYCAN

SAFETY PROFILE: When heated to decomposition it emits acrid smoke and irritating fumes.

BAD625

CAS: 10309-37-2

HR: 3

BAKUCHIOL

mf: C₁₈H₂₄O mw: 256.42

PROP: Oil. Bp: 145–147° @ 0.7 mm.

TOXICITY DATA with REFERENCE:

orl-mus LD50:2560 mg/kg MZHUDX 42,646,80

ipr-mus LD50:94 mg/kg MZHUDX 42,646,80

ivn-mus LD50:31 mg/kg MZHUDX 42,646,80

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and fumes.

BAD750 **CAS: 59-52-9** **HR: 3**
BAL

mf: C₃H₈OS₂ mw: 124.23

PROP: Viscous, oily liquid; pungent odor. Bp: 140° @ 40 mm, vap d: 4.3, d: 1.2385 @ 25°/4°.

SYNS: BRITISH ANTILEWISITE □ DICAPTOL □ DIMER-CAPROL PROPANOL □ DIMERCAPTOL □ 2,3-DIMERCAPTOL-1-PROPANOL □ DIMERCAPTOPROPANOL □ 2,3-DIMERCAPTO PROPANOL □ 2,3-DIMERCAPTOPROPAN-1-OL □ DITHIO GLYCEROL □ 1,2-DITHIOGLYCEROL □ 2,3-DITHIOPROPAN-OL □ SULFACTIN □ USAF ME-1

TOXICITY DATA with REFERENCE:

ims-hmn TDLo:3 mg/kg;BLD,SKN SCIEAS 102,601,45

ipr-rat LD50:105 mg/kg APFRAD 5,172,47

scu-rat LD50:2 g/kg APFRAD 5,172,47

ims-rat LD50:87 mg/kg TXAPA9 36,297,76

orl-mus LD50:217 mg/kg QJPPAL 21,364,48

ipr-mus LD50:25 mg/kg NTIS** AD277-689

ivn-mus LD50:56 mg/kg CSLNX* NX#04985

ims-mus LD50:113 mg/kg AEPPAE 223,408,54

ivn-rbt LD50:50 mg/kg BIJOAK 41,325,47

ims-rbt LD50:50 mg/kg BIJOAK 41,325,47

par-rbt LD50:40 mg/kg APFRAD 5,172,47

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison via ingestion, intramuscular, parenteral, intraperitoneal, and intravenous routes. Experimental teratogenic effects. Human systemic effects by intramuscular route: hemorrhage and dermatitis. Human blood and systemic skin effects by intramuscular route. It causes redness and swelling when applied locally to the skin, but does not produce blisters or ulcers. Intensely irritating to eyes and mucous membranes. Systemic symptoms are caused by injection. When heated to decomposition, it emits toxic fumes of SO_x. Used as an antidote to arsenic, gold, and mercury poisoning.

BAD800 **CAS: 71330-43-3** **HR: 2**
BALAGRIN

TOXICITY DATA with REFERENCE:

orl-rat LD50:1100 mg/kg PRKHDK 4,20,1979

SAFETY PROFILE: Moderately toxic by ingestion. Experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating vapors.

BAE000 **CAS: 81732-65-2** **HR: 3**
BALATA

PROP: Dried juice of the bully tree, *Mimosaops balata*. Resembles gutta percha.

SAFETY PROFILE: A mild irritant and allergen. Combustible when exposed to heat or flame.

BAE100 **CAS: 8008-88-6** **HR: 1**
BALDRIAN OIL

PROP: Yellowish to brownish, rather mobile, optically active liquid with not unpleasant smell and bitter taste.

SYN: BALDRIAN OEL

TOXICITY DATA with REFERENCE:

orl-rat LD50:15 g/kg PHARAT 14,435,59

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low toxicity by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BAE325 **CAS: 8029-29-6** **HR: 1**
BALSAM APPLE

PROP: A tree that may grow to 20 or 30 feet on rocks or other trees. The oval, leathery leaves are 3 to 8 inches across. It produces white flowers with pink edges and a gold center, and a golf-ball sized fruit which turns brown and opens when ripe. The trees grow wild in Hawaii, southern Florida, and the West Indies.

SYNS: CLUSIA ROSEA □ COPEY □ CUPEY □ FIGUIER MAUDIT MARRON (HAITI) □ PITCH APPLE □ SCOTCH ATTORNEY □ WILD MAMEE

SAFETY PROFILE: The fruit and sap contain an unidentified poison which causes profuse diarrhea after ingestion.

BAE750 **CAS: 9000-64-0** **HR: 1**
BALSAM of PERU

PROP: Dark-brown, viscid liquid; vanilla odor. Sol in fixed oils; sltly sol in propylene glycol; insol in glycerin. Extracted from *Myroxylon pereirae* Klotzsch.

SYNS: BALSAM PERU OIL (FCC) □ PERUVIAN BALSAM

SAFETY PROFILE: A mild allergen. Combustible when heated. When heated to decomposition it emits acrid smoke and irritating fumes.

BAF000 **CAS: 9000-64-0** **HR: 1**
BALSAM TOLU

PROP: Resin derived from *Tolujifera balsamam* (FCTXAV 14,659,76).

SYNS: BALSAMS, TOLU □ OPOBALSAM □ RESIN TOLU □ THOMAS BALSAM □ TOLU □ TOLU BALSAM GUM □ TOLU BALSAM TINCTURE □ TOLU RESIN

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD FCTXAV 14,689,76

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A mild skin irritant. When heated to decomposition it yields toxic and irritating fumes and smoke.

BAF100 **CAS: 81732-65-2** **HR: 3**
BAMBUTEROL

mf: C₁₈H₂₉N₃O₅ mw: 367.45

SYN: CARBAMIC ACID, DIMETHYL-, 5-(2-((1,1-DIMETHYL-ETHYL)AMINO)-1-HYDROXYETHYL)-1,3-PHENYLENE ESTER

TOXICITY DATA with REFERENCE:

ipr-mus LDLo:0.3 mg/kg JPETAB 293,896,2000

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x.

BAF250 **CAS: 8029-29-6** **HR: 2**

BANDANE

PROP: A mixture of isomers containing 60–62% chlorine used as preemergent herbicide (27ZTAP 3,20,69).

SYNS: HALTS □ POLYCHLORODICYCLOPENTADIENE □ POLYCHLORODICYCLOPENTADIENE ISOMERS

TOXICITY DATA with REFERENCE:

orl-rat LD50:504 mg/kg WRPCA2 9,119,70

skn-rat LD50:12 g/kg 27ZTAP 3,20,69

SAFETY PROFILE: Moderately toxic by ingestion. Mildly toxic by skin contact. When heated to decomposition it emits toxic fumes of Cl⁻. See also CHLORINATED HYDROCARBONS, ALIPHATIC.

BAF325**HR: 3****BANE BERRY**

PROP: Perennial herbs 1 to 2 feet tall with large compound leaves. It grows small white flowers in the spring and berries in the summer. The color of the berries depends on the species: *A. pachypoda*, white; *A. rubra*, red; *A. spicata*, purple-black. Various species are found in the temperate zones of North America from Canada to Georgia and New Mexico. Some are cultivated.

SYNS: ACTAEA (VARIOUS SPECIES) □ A. PACHYPODA □ A. RUBRA □ A. SPICATA □ COHOSH □ DOLLS EYES □ HERB-CHRISTOPHER □ NECKLACEWEED □ PAIN de COULEUVRE (CANADA) □ POISON de COULEUVRE (CANADA) □ SNAKEBERRY

SAFETY PROFILE: The toxin, whose identity is not known, is found only in the berries and roots. Liquid from these is a strong irritant and forms blisters on the skin and mucous membranes. Ingestion causes pain and inflammation of the lips, mouth, and throat, vomiting and diarrhea with blood, abdominal cramps, kidney damage, and central nervous system effects including dizziness, confusion, fainting, and convulsions.

BAF500**HR: 3****BANOMITE**

mf: C₁₃H₈Cl₄N₂ mw: 334

PROP: White to yellow crystals, almost insol in water, sol in org solvs, mp: 98°.

SAFETY PROFILE: Poison by ingestion and dermal routes. A skin irritant and allergen. Dangerous; when heated to decomposition it evolves highly toxic fumes of NO_x and Cl⁻. An acaricide.

BAF825**CAS: 1415-73-2****HR: 3****BARBALOIN**

mf: C₂₁H₂₂O₉ mw: 418.43

PROP: Yellow needles from EtOH. Mp: 148°. Sol in water.

SYNS: 10-(1',5'-ANHYDROGLUCOSYL)ALOE-EMODIN-9-ANTHRONE □ 1,8-DIHYDROXY-3-HYDROXYMETHYL-10-(6-HYDROXYMETHYL-3,4,5-TRIHYDROXY-2-PYRANYL)ANTHRONE □ 10-GLUCOPYRANOSYL-1,8-DIHYDROXY-3-(HYDROXYMETHYL)-9(10H)-ANTHRACENONE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:200 mg/kg 85GDA2 8(2),314,82

orl-cat LDLo:500 mg/kg HBAMAK 4,1298,35

scu-rbt LDLo:200 mg/kg HBAMAK 4,1298,35

scu-pgn LDLo:200 mg/kg HBAMAK 4,1298,35

SAFETY PROFILE: Poison by subcutaneous and intravenous routes. Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and fumes. A cathartic and purgative.

BAF850**CAS: 123497-99-4****HR: 3****BARBININE**

mf: C₃₆H₄₆N₂O₁₀ mw: 666.84

SYN: ACONITAN-14-ONE, 7,8-DIHYDROXY-20-ETHYL-4-(((2-(3-METHYL-2,5-DIOXO-1-PYRROLIDINYL)BENZOYL)OXY)METHYL)-1,6,16-TRIMETHOXY-, (1-α-4(S),6-β,16-β)-

TOXICITY DATA with REFERENCE:

scu-mus LD50:175 mg/kg JAFCAU 41,96,93

SAFETY PROFILE: A poison by subcutaneous route. When heated to decomposition it emits toxic vapors of NO_x.

BAG000**CAS: 57-44-3****HR: 3****BARBITAL**

mf: C₈H₁₂N₂O₃ mw: 184.22

PROP: Faintly bitter crystals from H₂O; polymorphic forms; trigonal crystals, monoclinic prisms, monoclinic needles, and triclinic cryst. Mp: 190°.

SYNS: BARBITONE □ DEBA □ DIEMAL □ DIETHYL BARBITONE □ DIETHYL-BARBITURIC ACID □ 5,5-DIETHYL BARBITURIC ACID □ DIETHYLMALONYLUREA □ 5,5-DIETHYL-2,4,6(1H,3H,5H)-PYRIMIDINETRIONE □ DORMONAL □ ETHYLBARBITAL □ HYPNOGENE □ MALONAL □ SEDEVAL □ URONAL □ VEROLETTIN □ VERONAL □ VESPERAL

TOXICITY DATA with REFERENCE:

cyt-mus-ipr 33 g/kg IJMRAQ 61,1568,73

cyt-ham:lng 1 g/L ATSUDG (4),41,80

ipr-rat LDLo:300 mg/kg JPETAB 44,325,32

scu-rat LD50:450 mg/kg AEPPAE 152,341,30

orl-mus LD50:600 mg/kg NIIRDN 6,590,82

ipr-mus LD50:178 mg/kg FRPSAX 14,269,59

scu-mus LD50:630 mg/kg YKKZAJ 74,122,54

orl-cat LDLo:280 mg/kg PHREA7 19,472,39

scu-rbt LDLo:250 mg/kg JACSAT 45,243,23

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Poison by ingestion, intravenous, intraperitoneal, and subcutaneous routes. Ingestion causes psychological effects in humans. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x. See also BARBITURATES. An hypnotic and sedative.

BAG250**CAS: 144-02-5****HR: 3****BARBITAL SODIUM**

mf: C₈H₁₂N₂O₃•Na mw: 207.21

PROP: Bitter crystals or powder.

SYNS: BARBITAL Na □ BARBITAL SOLUBLE □ BARBITONE SODIUM □ DIETHYLBARBITURATE MONOSODIUM □ 5,5-DIETHYLBARBITURIC ACID SODIUM deriv. □ DIETHYL MALONYLUREA SODIUM □ EMBINAL □ MEDINAL □ NATRINAL □ NATRIUMBARBITALS (GERMAN) □ NERV OSETON □ 2,4,6(1H,3H,5H)-PYRIMIDINETRIONE, 5,5-DIETHYL-, MONOSODIUM SALT (9CI) □ SODIUM BARBITAL □ SODIUM BARBITONE □ SODIUM DIETHYLBARBITURATE □ SODIUM-5,5-DIETHYLBARBITURATE □ SODIUM ETHYLBARBITAL □

SODIUM MALONYLUREA □ SODIUM VERONAL □ SOLUBLE BARBITAL □ SOPRINAL □ THYALONE □ VERONAL SODIUM

TOXICITY DATA with REFERENCE:

sce-ham:emb 100 µg/L IJCNAW 20,768,77

orl-rat TDLo:121 g/kg/72W-C:NEO CRNGDP 11,2149,90

orl-rat LD50:600 mg/kg ARTODN 54,275,83

scu-rat LDLo:300 mg/kg JPETAB 31,1,27

ivn-rat LD50:280 mg/kg JPETAB 135,213,62

orl-mus LD50:800 mg/kg TXAPA9 27,70,74

ipr-mus LD50:620 mg/kg JPETAB 87,265,46

scu-mus LD50:700 mg/kg JPETAB 109,268,53

ivn-mus LD50:830 mg/kg TXAPA9 27,70,74

orl-dog LDLo:350 mg/kg 27ZWAY 2,-,36

ivn-dog LDLo:300 mg/kg JPETAB 60,125,37

orl-cat LDLo:275 mg/kg 27ZWAY 2,-,36

SAFETY PROFILE: Poison by ingestion, subcutaneous, intravenous, and intraperitoneal routes. Large doses cause marked depression (sometimes preceded by excitation), prolonged coma, and death. Experimental teratogenic and reproductive effects. Allergic skin reactions may occur on contact. Implicated in development of aplastic anemia. Questionable carcinogen with experimental tumorigenic and neoplastigenic data. A truly habit-forming drug. Other experimental reproductive effects. Mutation data reported. Combustible. When heated to decomposition it emits toxic fumes of NO_x and Na₂O. See also BARBITURATES.

BAG500**HR: 3****BARBITURATES**

SYNS: BARBITAL □ BARBITAL SODIUM

□ BARBITONE

SAFETY PROFILE: Salts or derivatives of barbituric acid are central nervous system depressants, and are used as hypnotics, sedatives, and anesthetics. Usually administered orally. They are strongly habit forming. Several compounds including amo-, seco-, and pentobarbital are restricted chemicals. Their use can cause a reaction called barbiturism, which is marked by chills, headache, fever, and cutaneous eruptions. See BARBITAL SODIUM.

BAG750**HR: 1****BARBITURIC ACID**

mf: C₄H₄O₃N₂ mw: 128.1

PROP: Crystals or white to yellow-white powder, mp: 245°, bp: 260° (decomp).

SAFETY PROFILE: Mildly toxic. Irritating to skin, eyes, and mucous membranes. An allergen. Has no hypnotic properties. Combustible.

BAH250**CAS: 7440-39-3****HR: 3****BARIUM**

DOT: UN 1400

af: Ba aw: 137.36

PROP: Silver-white, sltly lustrous, somewhat malleable metal. Mp: 727°, bp: 1640°, d: 3.5 @ 20°, vap press: 10 mm @ 1049°. Dissolves in H₂O forming Ba(OH)₂ solns. Solution in NH₃(l) blue-black soln.

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg(Ba)/m³

ACGIH TLV: TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 0.5 mg(Ba)/m³

DOT CLASSIFICATION: 4.3; Label: Dangerous When Wet

SAFETY PROFILE: Water and stomach acids solubilize barium salts and can cause poisoning. Symptoms are vomiting, colic, diarrhea, slow irregular pulse, transient hypertension, and convulsive tremors and muscular paralysis. Death may occur in a few hours to a few days. Half-life of barium in bone has been estimated at 50 days. Dust is dangerous and explosive when exposed to heat, flame, or chemical reaction. Violent or explosive reaction with water, CCl₄, fluorotrichloromethane, trichloroethylene, and C₂Cl₄. Incompatible with acids, C₂Cl₃F₃, C₂H₂FCl₃, C₂HCl₃ and water, 1,1,2-trichlorotrifluoroethane, and fluorotrichloroethane. The powder may ignite or explode in air or other oxidizing gases. See also BARIUM COMPOUNDS.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Barium, Soluble Compounds, 7056.

BAH500**CAS: 543-80-6****HR: 3****BARIUM ACETATE**

mf: C₄H₆O₄•Ba mw: 255.44

PROP: White or colorless crystals. Decomp on heating with BaCO₃ formation. Very sol in H₂O.

SYNS: ACETIC ACID, BARIUM SALT □ BARIUM DIACETATE □ OCTAN BARNATY (CZECH)

TOXICITY DATA with REFERENCE:

orl-rat LD50:921 mg/kg MarJV# 29MAR77

ivn-mus LD50:21 mg/kg TXAPA9 22,150,72

orl-rbt LDLo:236 mg/kg EQSSDX 1,1,75

scu-rbt LDLo:96 mg/kg EQSSDX 1,1,75

ivn-rbt LDLo:12 mg/kg EQSSDX 1,1,75

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg(Ba)/m³

ACGIH TLV: TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 0.5 mg(Ba)/m³

SAFETY PROFILE: Poison via ingestion, intravenous, and subcutaneous routes. When heated to decomposition it emits acrid smoke and fumes. See also BARIUM COMPOUNDS.

BAH750**CAS: 12070-27-8****HR: 3****BARIUM ACETYLIDE**

mf: C₂Ba mw: 161.35

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Ignites on contact with vapors of water or ethanol in air. Incandescent reaction when heated with: hydrogen @ 150°C; chlorine @ 140°C; bromine @ 130°C; iodine @ 122°C; and selenium @ 150°C. See also BARIUM COMPOUNDS and ACETYLIDES.

BAI000 CAS: 18810-58-7 HR: 3**BARIUM AZIDE****DOT:** UN 0224/UN 1571mf: BaN₆ mw: 221.40**PROP:** Monoclinic prisms or crystals, decomp on heating with loss of N₂ at about 12°. Mp: evolves N₂ at about 120°, bp: explodes, d: 2.936. Very sol in H₂O; sltly sol in EtOH; insol in Et₂O.**SYNS:** BARIUM AZIDE, dry or wetted with <50% water, by weight (UN 0224) (DOT) □ BARIUM AZIDE, wetted with not <50% water, by weight (UN 1571) (DOT)**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.**OSHA PEL:** TWA 0.5 mg(Ba)/m³**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen**DFG MAK:** 0.5 mg(Ba)/m³**DOT CLASSIFICATION:** EXPLOSIVE 1.1A; Label: EXPLOSIVE 1.1A, Poison (UN 0224); DOT Class: 4.1; Label: Flammable Solid, Poison (UN 1571)**SAFETY PROFILE:** A poison. Moderate explosion hazard when shocked or heated to 275°. Spontaneously flammable in air. Very unstable. When heated to decomposition it emits toxic fumes of NO_x. See also BARIUM COMPOUNDS (soluble) and AZIDES.**BAI500 HR: 3****BARIUM BENZOATE**mf: Ba(C₇H₅O₂)₂•2H₂O mw: 415.61**PROP:** White, nacreous leaflets. Mp: loses 2H₂O @ 100°.**CONSENSUS REPORTS:** Barium and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Deadly poison. See also BARIUM COMPOUNDS (soluble).**BAI750 CAS: 13967-90-3 HR: 3****BARIUM BROMATE****DOT:** UN 2719mf: Ba(BrO₃)₂•H₂O mw: 411.21**PROP:** White or colorless crystals or crystalline powder. Decomp on heating with O₂ evolution and BaBr₂ formation. Mp: decomp @ 260°, d: 3.99 @ 18°.**CONSENSUS REPORTS:** Barium and its compounds are on the Community Right-To-Know List. EPA TSCA Chemical Inventory.**OSHA PEL:** TWA 0.5 mg(Ba)/m³**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen**DFG MAK:** 0.5 mg(Ba)/m³**DOT CLASSIFICATION:** 5.1; Label: Oxidizer, Poison**SAFETY PROFILE:** Very toxic. Fire hazard by chemical reaction with easily oxidized materials. Explodes at 300°. Mixtures with sulfur are unstable storage hazards; igniting immediately at 91°C and after a 2–11 day delay period at room temperature. Incompatible with Al, As, C, Cu, metal sulfides, organic matter, P, and reducing materials. When heated to decomposition it emits toxic fumes of Br⁻. See also BARIUM COMPOUNDS (soluble) and BROMINE.**BAI770 CAS: 15337-60-7 HR: 2****BARIUM CADMIUM LAURATE****SYN:** LAURIC ACID, BARIUM CADMIUM SALT**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1696 mg/kg GTPZAB 18(3),50,74

orl-mus LD50:516 mg/kg GISAAA 46(4),18,81

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**OSHA PEL:** TWA 0.5 mg(Ba)/m³**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen; 0.05 mg(Cd)/m³**DFG MAK:** 0.5 mg(Ba)/m³**NIOSH REL:** (Cadmium, dust and fume): lowest feasible conc.**SAFETY PROFILE:** Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of Ba⁺ and Cd⁻.**BAI800 CAS: 1191-79-3 HR: 3****BARIUM CADMIUM STEARATE**mf: C₇₂H₁₄₀O₈•Ba•Cd mw: 1383.86**SYNS:** CADMIUM BARIUM STEARATE □ OCTADECANOIC ACID, BARIUM CADMIUM SALT (4:1:1) (9CI) □ STEARIC ACID, BARIUM CADMIUM SALT (4:1:1)**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1980 mg/kg GISAAA 40(2),102,75

orl-mus LD50:1381 mg/kg 41HTAH -,14,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**OSHA PEL:** TWA 5 µg(Cd)/m³**ACGIH TLV:** TWA 0.01 mg(Cd)/m³; Suspected Carcinogen**NIOSH REL:** TWA reduce to lowest feasible level**SAFETY PROFILE:** Confirmed human carcinogen. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of Ba and Cd.**BAI810 CAS: 52869-93-9 HR: 2****BARIUM CALCIUM TITANATE****SYNS:** BARIUM CALCIUM TITANIUM OXIDE □ CALCIUM BARIUM TITANATE**TOXICITY DATA with REFERENCE:**

orl-rat LDLo:15 g/kg GISAAA 39(6),102,74

ipr-rat LD50:1700 mg/kg GTPZAB 26(9),10,82

SAFETY PROFILE: Moderately toxic by intraperitoneal. Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of Ba and Ti.**BAI825 CAS: 4696-54-2 HR: 2****BARIUM CAPRYLATE**mf: C₁₆H₃₂O₄•Ba mw: 425.82**SYNS:** BARIUM OCTANOATE □ BARIUM OCTOATE**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1 g/kg GISAAA 39(11),91,74

orl-mus LD50:1100 mg/kg GISAAA 39(11),91,74

orl-gpg LD50:1250 mg/kg GISAAA 39(11),91,74

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Moderately toxic by ingestion.**BAJ000 HR: 3**

BARIUM CARBIDEmf: BaC₂ mw: 161.4**PROP:** Gray crystals. D: 3.75.**CONSENSUS REPORTS:** Barium and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** A poison. A fire and explosion hazard by chemical reaction with moisture to form acetylene. Incompatible with Se; S; H₂O. To fight fire, use CO₂, dry chemical. See also BARIUM COMPOUNDS (soluble)**BAJ250 CAS: 513-77-9 HR: 3
BARIUM CARBONATE (1:1)**mf: CO₃•Ba mw: 197.35**PROP:** White orthorhombic powder or crystals, becomes hexagonal at 8° and cubic at 976°. Decomp on heating with CO₂ loss. Mp: 1740° @ 90 atm, bp: decomp, d: 4.43. Dissolves in acids to form corresponding Ba salts. Practically insol in H₂O; insol in alc EtOH.**SYNS:** BARIUM CARBONATE □ CARBONIC ACID, BARIUM SALT (1:1) □ C.I. 77099 □ C.I. PIGMENT WHITE 10**TOXICITY DATA with REFERENCE:**

orl-man LDLo:800 mg/kg YKYUA6 28,329,77
 orl-wmn TDLo:800 mg/kg:GIT BMJOAE 289,882,84
 orl-hmn TDLo:11 mg/kg:GIT YKYUA6 31,1247,80
 orl-hmn LDLo:17 mg/kg YKYUA6 28,329,77
 orl-hmn TDLo:29 mg/kg:PNS IJMDAI 3,565,67
 orl-rat LD50:418 mg/kg 85GMAT -,23,82
 ivn-rat LDLo:20 mg/kg EQSSDX 1,1,75
 orl-mus LD50:200 mg/kg 85GMAT -,23,82
 ipr-mus LD50:50 mg/kg 85GMAT -,23,82
 orl-dog LDLo:400 mg/kg PCOC**-,95,66

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.**OSHA PEL:** TWA 0.5 mg(Ba)/m³**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen**DFG MAK:** 0.5 mg(Ba)/m³**SAFETY PROFILE:** Poison by ingestion, intravenous, and intraperitoneal routes. Human systemic effects by ingestion: stomach ulcers, muscle weakness, paresthesias and paralysis, hypermotility, diarrhea, nausea or vomiting, lung changes. Experimental reproductive effects. Incompatible with BrF₃ and 2-furanpercarboxylic acid. See also BARIUM COMPOUNDS (soluble).**BAJ500 CAS: 13477-00-4 HR: 3
BARIUM CHLORIDE****DOT:** UN 1445mf: Cl₂O₆•Ba mw: 304.24**PROP:** Colorless prisms or white powder. Mp: loses H₂O @ 414°, d: 3.18.**SYN:** CHLORIC ACID, BARIUM SALT**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.**OSHA PEL:** TWA 0.5 mg(Ba)/m³**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen**DFG MAK:** 0.5 mg(Ba)/m³**DOT CLASSIFICATION:** 5.1; Label: Oxidizer, Poison
SAFETY PROFILE: A poison. For fire and explosion hazards, see CHLORATES. Incompatible with Al, As, C, charcoal, Cu, MnO₂, metal sulfides, Si₃N₄, organic matter, P, S. See also BARIUM COMPOUNDS (soluble).**BAK000 CAS: 10361-37-2 HR: 3
BARIUM CHLORIDE**mf: BaCl₂ mw: 208.24**PROP:** Colorless, deliquescent, orthorhombic, flat crystals. Undergoes orthorhombic to cubic phase transition at 9°. Mp: transition @ 925° to cubic crystals, bp: 1560°, d: 3.856 @ 24°. Very sol in H₂O; practically insol in EtOH. IDLH 50 mg/m³ (as Ba).**SYNS:** BARIUM DICHLORIDE □ NCI-C61074 □ SBa 0108E**TOXICITY DATA with REFERENCE:**

mrc-smc 14 mmol/L MUTAEX 1,21,86
 orl-rat LD50:118 mg/kg FOREAE 7,313,42
 scu-rat LD50:178 mg/kg 27ZIAQ -,53,73
 ivn-rat LDLo:20 mg/kg JLCMAK 15,35,29
 orl-mus LDLo:70 mg/kg EQSSDX 1,1,75
 ipr-mus LD50:184 mg/kg GTPZAB 28(6),45,84
 scu-mus LDLo:10 mg/kg NTIS** AEC-TR-6710
 orl-dog LDLo:90 mg/kg 27ZIAQ -,53,73
 scu-dog LDLo:10 mg/kg EQSSDX 1,1,75

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List. EPA Genetic Toxicology Program.**OSHA PEL:** TWA 0.5 mg(Ba)/m³**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen**DFG MAK:** 0.5 mg(Ba)/m³**SAFETY PROFILE:** A poison by ingestion, subcutaneous, intravenous, and intraperitoneal routes. Inhalation absorption of barium chloride equals 60–80%; oral absorption equals 10–30%. Experimental reproductive effects. Mutation data reported. See also BARIUM COMPOUNDS (soluble). When heated to decomposition it emits toxic fumes of Cl⁻.**BAK020 CAS: 10326-27-9 HR: 3
BARIUM CHLORIDE, DIHYDRATE**mf: BaCl₂•2H₂O mw: 244.28**PROP:** White crystalline solid with bitter, salty taste. D: 3.097 @ 24°/4°, mp: 963°, bp: 35.7 @ 20 mm Hg. Sol in water: >=100 mg/mL @ 20°.**SYNS:**

□ BARIUM DICHLORIDE DIHYDRATE □ NCI-C61074

TOXICITY DATA with REFERENCE:

ipr-mus LD50:51 mg/kg TXAPA9 63,461,82

CONSENSUS REPORTS: Reported in NTP Carcinogenesis studies (drinking); No Evidence: mouse, rat NTPTR* NTP-TR-432,94.**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen**SAFETY PROFILE:** A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of Ba and Cl⁻.**BAK125 CAS: 14674-74-9 HR: 3**

BARIUM CHLORITEmf: BaCl₂O₄ mw: 172.23**CONSENSUS REPORTS:** Barium and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** A poison. Decomposes explosively at 190°C. Ignites on contact with dimethyl sulfate. When heated to decomposition it emits toxic fumes of Cl⁻. See also BARIUM COMPOUNDS and CHLORITES.**BAK250 CAS: 10294-40-3 HR: 3
BARIUM CHROMATE(VI)**mf: Ba•CrO₄ mw: 255.36**PROP:** Heavy, pale-yellow, crystalline powder; darkens on heating. D: 4.498 @ 15°. Sol in strong acids; insol in org solvents.**SYNS:** BARIUM CHROMATE (1:1) □ BARIUM CHROMATE OXIDE □ BARYTA YELLOW □ CHROMIC ACID, BARIUM SALT (1:1) □ C.I. 77103 □ C.I. PIGMENT YELLOW 31 □ LEMON CHROME □ LEMON YELLOW □ PERMANENT YELLOW □ STEINBUHL YELLOW □ ULTRAMARINE YELLOW**TOXICITY DATA with REFERENCE:**

sce-ham:ovr 100 µg/L MUREAV 156,219,85

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 7,165,87; Animal Inadequate Evidence IMEMDT 2,100,73; Human Sufficient Evidence IMEMDT 23,205,80. Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.**OSHA PEL:** TWA 0.1 mg (C₃O₃)/m³; 0.5 mg(Ba)/m³**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen; 0.05 mg(Cr)/m³; Confirmed Human Carcinogen**DFG MAK:** 0.5 mg(Ba)/m³**NIOSH REL:** TWA 0.001 mg(Cr(VI))/m³**SAFETY PROFILE:** Confirmed human carcinogen. A poison. Mutation data reported. Reacts vigorously with reducing materials. See also BARIUM COMPOUNDS (soluble) and CHROMIUM COMPOUNDS. Used in pyrotechnics and as an explosive initiator.**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: Chromium Hexavalent 7024.**BAK500 HR: 3
BARIUM COMPOUNDS (soluble)****CONSENSUS REPORTS:** Barium and its compounds are on the Community Right-To-Know List.**OSHA PEL:** Soluble Compounds: TWA 0.5 mg(Ba)/m³**ACGIH TLV:** Soluble Compounds: TWA 0.5 mg/m³**DFG MAK:** Soluble Compounds: 0.5 mg/m³**DOT CLASSIFICATION:** 6.1; Label: Poison**SAFETY PROFILE:** The chromate is a human carcinogen. The soluble barium salts, such as the chloride and sulfide, are poisonous when ingested. The insoluble sulfate used in radiography is not acutely toxic. See also BARIUM SULFATE. Few cases of industrial systemic poisoning have been reported, but one investigator describes a fatal case of poisoning attributed to barium oxide, the symptoms being severe abdominal pain with vomiting, dyspnea, rapid pulse, paralysis of the arm and leg, and eventually cyanosis and death. The same

investigator produced paralysis in animals with barium oxide and carbonate. The usual result of exposure to the sulfide, oxide, and carbonate is irritation of the eyes, nose, and throat, and of the skin, producing dermatitis. The salts mentioned are somewhat caustic.

**BAK750 CAS: 542-62-1 HR: 3
BARIUM CYANIDE****DOT:** UN 1565mf: C₂BaN₂ mw: 189.38**PROP:** White, crystalline powder.**SYNS:** BARIUM CYANIDE, solid (DOT) □ BARIUM DICYANIDE □ RCRA WASTE NUMBER P013**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory. Cyanide and its compounds, as well as barium and its compounds, are on the Community Right-To-Know List.**OSHA PEL:** TWA 0.5 mg(Ba)/m³**ACGIH TLV:** TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen**DFG MAK:** 0.5 mg(Ba)/m³**DOT CLASSIFICATION:** 6.1; Label: Poison**SAFETY PROFILE:** A deadly poison. See also CYANIDE and BARIUM COMPOUNDS (soluble). When heated to decomposition it emits toxic fumes of CN⁻.**BAL000 HR: 3
BARIUM CYANOPLATINITE**mf: BaPt(CN)₄•4H₂O mw: 508.6**PROP:** (a) Monoclinic, yellow crystals; (b) rhombic crystals. Mp: loses 2H₂O @ 100°; d: (a) 2.076, (b) 2.085. IDLH 4 mg/m³ (as Pt).**CONSENSUS REPORTS:** Cyanide and its compounds, as well as barium and its compounds, are on the Community Right-To-Know List.**OSHA PEL:** TWA 5 mg(CN)/m³**ACGIH TLV:** CL 5 mg(CN)/m³ (skin)**DFG MAK:** 5 mg/m³**NIOSH REL:** (Cyanide) CL 5 mg(CN)/m³/10M**SAFETY PROFILE:** A poison. See also BARIUM COMPOUNDS (soluble), CYANIDE, and PLATINUM COMPOUNDS. When heated to decomposition it emits highly toxic fumes of CN⁻ and NO_x.**BAL100 CAS: 64011-64-9 HR: 3
BARIUM CYCLOHEXANESULFAMATE****SYN:** CYCLOHEXANESULFAMIC ACID, BARIUM SALT**TOXICITY DATA with REFERENCE:**

ipr-rat LDLo:250 mg/kg NCNSA6 5,40,1953

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of SO_x and Ba.**BAL250 HR: 3
BARIUM DIAZIDE**mf: BaN₆ mw: 221.38**CONSENSUS REPORTS:** Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison. Impact-sensitive when dry; avoid contact with Pb, acids. See also BARIUM COMPOUNDS and AZIDES.

BAL275 CAS: 6332-68-9 HR: 3
BARIUM DIBENZYLPHOSPHATE

mf: $C_{28}H_{28}BaO_8P_2$ mw: 691.84

TOXICITY DATA with REFERENCE:

ivn-mus LD50:56 mg/kg CSLNX* NX#04099

OSHA PEL: TWA 0.5 mg(Ba)/m³

ACGIH TLV: TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 0.5 mg(Ba)/m³

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits toxic fumes of PO_x and Ba.

BAL500 HR: 3
BARIUM DICHROMATE

mf: BaCr₂O₇ mw: 353.38

PROP: Brownish-red, crystalline masses.

SYN: BARIUM BICHROMATE

CONSENSUS REPORTS: Barium and its compounds, as well as chromium and its compounds, are on the Community Right-To-Know List.

SAFETY PROFILE: A poison. Some chromates are carcinogenic. A moderate fire hazard by chemical reaction with easily oxidized materials. A powerful oxidizer. Incompatible with reducing materials. See also BARIUM COMPOUNDS and CHROMIUM COMPOUNDS.

BAL625 CAS: 12047-11-9 HR: D
BARIUM FERRITE

mf: Ba•Fe₁₂O₁₉ mw: 1111.54

PROP: Black, brown or dark grey powder with no odor. Mp: 2400°, d: 5.07.

SYNS: BARIUM FERRATE □ BARIUM HEXAFERRITE □ FERRATE (Fe₁₂O₁₉²⁻) BARIUM (1:1) (9CI) □ FERROXDURE

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: An experimental teratogen. Other experimental reproductive effects. See also BARIUM COMPOUNDS.

BAL750 CAS: 13862-62-9 HR: 3
BARIUM FLUOBORATE

mf: B₂F₈•Ba mw: 310.96

SYNS: BARIUM BIS(TETRAFLUOROBORATE) □ BARIUM TETRAFLUOROBORATE

TOXICITY DATA with REFERENCE:

orl-rat LDLo:250 mg/kg NCNSA6 5,27,53

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg(Ba)/m³; 2.5 mg(F)/m³

ACGIH TLV: TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen; TWA 2.5 mg(F)/m³; BEI: 3 mg/g creatinine of fluorides in urine prior to shift; 10 mg/g creatinine of fluorides in urine at end of shift.

DFG MAK: 0.5 mg(Ba)/m³

NIOSH REL: (Fluorides, Inorganic) TWA 2.5 mg(F)/m³

SAFETY PROFILE: Poison by ingestion. See also BARIUM COMPOUNDS, BORON COMPOUNDS, and FLUORIDES. When heated to decomposition it emits toxic fumes of F⁻.

BAM000 CAS: 7787-32-8 HR: 3
BARIUM FLUORIDE

mf: BaF₂ mw: 175.34

PROP: White, colorless powder or cubic crystals. Mp: 1368°, bp: 2137°, d: 4.89. Sltly sol in H₂O.

SYN: BARYUM FLUORURE (FRENCH)

TOXICITY DATA with REFERENCE:

orl-rat LD50:250 mg/kg VAMNAQ (2),28,77

ipr-mus LD50:29,910 µg/kg DZZEA7 34,484,79

scu-frg LDLo:1540 mg/kg CRSBAW 124,133,37

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg(Ba)/m³; 2.5 mg(F)/m³

ACGIH TLV: TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen; TWA 2.5 mg(F)/m³; BEI: 3 mg/g creatinine of fluorides in urine prior to shift; 10 mg/g creatinine of fluorides in urine at end of shift.

DFG MAK: 0.5 mg(Ba)/m³

NIOSH REL: (Fluorides, Inorganic) TWA 2.5 mg(F)/m³

SAFETY PROFILE: A poison by ingestion and intraperitoneal routes. Moderately toxic by subcutaneous route. An experimental teratogen. See also FLUORIDES and BARIUM COMPOUNDS (soluble). When heated to decomposition it emits toxic fumes of F⁻.

BAM250 CAS: 13477-09-3 HR: 3
BARIUM HYDRIDE

mf: BaH₂ mw: 139.38

PROP: Gray, orthorhombic crystals or lumps. Mp: decomp @ 675°, bp: 1400°, d: 4.21 @ 0°.

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison. Rapidly decomposed by water and acids. In powder form, it ignites spontaneously in air and reacts vigorously with water. Coarser material ignites when heated in oxygen. Moisture-sensitive, reacts with H₂O with formation of Ba(OH)₂ and H₂. Decomps on heating with evolution of H₂ gas and formation of Sr. It is incompatible with water; acids; and metal halogenates. A dangerous fire hazard because moisture may cause it to ignite. To fight fire, use dry chemical, graphite, CO₂. See also BARIUM COMPOUNDS (soluble) and HYDRIDES.

BAM500 CAS: 17194-00-2 HR: 3
BARIUM HYDROXIDE

mf: Ba(OH)₂ mw: 171.35

PROP: Colorless or white crystals with no odor. Bp: 780°, mp: 78°.

SYNS: BARIUM DIHYDROXIDE □ CAUSTIC BARYTA

TOXICITY DATA with REFERENCE:

ipr-mus LD50:255 mg/kg GTPZAB 28(6),45,84

orl-unr LD50:308 mg/kg GTPZAB 28(6),45,84

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison by ingestion and intraperitoneal routes. See also BARIUM COMPOUNDS (soluble). Incompatible with chlorinated rubber.

BAM750**HR: 3****BARIUM HYPOPHOSPHITE**mf: $\text{Ba}(\text{H}_2\text{PO}_2)_2 \cdot \text{H}_2\text{O}$ mw: 285.38**PROP:** Crystalline powder. Mp: decomp, d: 2.90 @ 17°.

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison. When heated to decomposition it emits highly toxic fumes of PO_x . Incompatible with KClO_3 . When heated to decomposition it emits toxic fumes of PO_x . See also BARIUM COMPOUNDS (soluble).

BAN000**HR: 3****BARIUM IODATE**mf: $\text{Ba}(\text{IO}_3)_2$ mw: 487.20**PROP:** White, crystalline powder. Mp: decomp, d: 4.998.

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison. A powerful oxidizer. Incompatible with Al; As; C; Cu; metal sulfides; organic matter. When heated to decomposition it emits toxic fumes of I^- . See also BARIUM COMPOUNDS (soluble) and IODATES.

BAN250**CAS: 10022-31-8****HR: 3****BARIUM(II) NITRATE (1:2)****DOT:** UN 1446mf: $\text{N}_2\text{O}_6 \cdot \text{Ba}$ mw: 261.36

PROP: Lustrous, colorless, cubic crystals. Mp: 592°, bp: decomp, d: 3.24 @ 23°. Decomp on heating with evolution of NO_2 and O_2 and formation of BaO . Insol in EtOH. IDLH 50 mg/ m^3 (as Ba).

SYNS: BARIUM DINITRATE □ BARIUM NITRATE (DOT) □ DUSICNAN BARNATY (CZECH) □ NITRATE de BARYUM (FRENCH) □ NITRIC ACID, BARIUM SALT

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,10,72

eye-rbt 100 mg/24H MOD 28ZPAK -,10,72

orl-rat LD50:355 mg/kg 28ZPAK -,10,72

scu-mus LDLo:10 mg/kg NTIS** AEC-TR-6710

ivn-mus LD50:8500 µg/kg TXAPA9 22,150,72

orl-dog LDLo:800 mg/kg YKYUA6 31,1247,80

orl-rbt LDLo:150 mg/kg YKYUA6 31,1247,80

par-rbt LDLo:30 mg/kg MELAAD 30,44,39

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg(Ba)/ m^3

ACGIH TLV: TWA 0.5 mg(Ba)/ m^3 ; Not Classifiable as a Human Carcinogen

DFG MAK: 0.5 mg(Ba)/ m^3 **DOT CLASSIFICATION:** 5.1; Label: Oxidizer, Poison

SAFETY PROFILE: A poison by ingestion, subcutaneous, parenteral, and intravenous routes. An

irritant to skin and eyes. When heated to decomposition it emits very toxic fumes of NO_x . An oxidizer. Mixtures with finely divided aluminum-magnesium alloys are easily ignitable and extremely sensitive to friction or impact. Such mixtures are used in chemical photoflash applications. Incompatible with $(\text{Mg} + \text{BaO}_2 + \text{Zn})$, Al, and Mg alloys. When heated to decomposition it emits toxic fumes of NO_x . See also BARIUM COMPOUNDS (soluble) and NITRATES.

BAN500**CAS: 12047-79-9****HR: 3****BARIUM NITRIDE**mf: Ba_3N_2 mw: 440.10

PROP: Colorless crystals or deep purple powder. Extremely moisture-sensitive. Reacts with H_2O with formation of $\text{Ba}(\text{OH})_2$ and evolution of NH_3 . Decomp on heating to form Ba_2N and N_2 . Bp: 1000° (vac), d: 4.783 @ 25°/4°.

TOXICITY DATA with REFERENCE:

orl-mus LD50:46,100 µg/kg TOIZAG 22,119,75

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison by ingestion. Flammable by spontaneous chemical reaction with water to liberate explosive ammonia gas. Dangerous; explodes upon heating and by spontaneous chemical reaction, liberating NH_3 vapor which can form explosive mixtures with air. Violent reaction with air or moisture. See also BARIUM COMPOUNDS (soluble) and AMMONIA.

BAO000**CAS: 1304-28-5****HR: 3****BARIUM OXIDE****DOT:** UN 1884mf: BaO mw: 153.34

PROP: White to yellowish-white powder or cubic crystals; moisture-sensitive. Mp: 1913°, bp: 2000° (approx), d: 5.72. Mod sol in EtOH; insol in Me_2CO .

SYNS: BARIUM MONOXIDE □ BARIUM PROTOXIDE □ BARYTA □ CALCINED BARYTA □ OXYDE de BARYUM (FRENCH)

TOXICITY DATA with REFERENCE:

scu-mus LD50:50 mg/kg ZVKOA6 19,186,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg(Ba)/ m^3

ACGIH TLV: TWA 0.5 mg(Ba)/ m^3 ; Not Classifiable as a Human Carcinogen

DFG MAK: 0.5 mg(Ba)/ m^3 **DOT CLASSIFICATION:** 6.1; Label: KEEP AWAY FROM FOOD

SAFETY PROFILE: A poison via subcutaneous route. See also BARIUM COMPOUNDS (soluble). Combustible by spontaneous chemical reaction; produces heat on contact with water or steam. Reacts with H_2O , $\text{Ba}(\text{OH})_2$. Incompatible with H_2S , hydroxylamine, N_2O_4 , triuranium octaoxide, SO_3 .

BAO250**CAS: 1304-29-6****HR: 3****BARIUM PEROXIDE****DOT:** UN 1449

mf: BaO₂ mw: 169.34

PROP: Pale, grayish-white powder. Mp: 450°, bp: loses O₂ @ 800°, d: 4.96. Decomp on heating to BaO and O₂. Dissolves in water with formation of H₂O₂.

SYNS: BARIO (PEROSSIDO di) (ITALIAN) □ BARIUM BINOXIDE □ BARIUM DIOXIDE □ BARIUMPEROXID (GERMAN)

□ BARIUMPEROXYDE (DUTCH) □ BARIUM SUPEROXIDE □ DIOXYDE de BARYUM (FRENCH) □ PEROXYDE de BARYUM (FRENCH)

TOXICITY DATA with REFERENCE:

scu-mus LD50:50 mg/kg ZVKOA6 19,186,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg(Ba)/m³

ACGIH TLV: TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 0.5 mg(Ba)/m³

DOT CLASSIFICATION: 5.1; Label: Oxidizer, Poison

SAFETY PROFILE: A poison via subcutaneous route. A powerful oxidizer. Explodes on contact with acetic anhydride. Ignites when mixed with calcium-silicon alloys, powdered aluminum, powdered magnesium, water + organic compounds. Mixtures with propane react violently when heated. The powder ignites when heated to 265°C with selenium. Wood ignites with friction from the peroxide. Incompatible with H₂S, water, peroxyformic acid, hydroxylamine solution, mixture of (Mg + Zn + Ba(NO₃)₂), and organic matter. See also BARIUM COMPOUNDS (soluble) and PEROXIDES, INORGANIC.

BAO300 CAS: 50864-67-0 HR: 3
BARIUM POLYSULFIDE

SYNS: BARIUMPOLYSULFID □ BARIUM SULFIDE □ SOLABAR □ SOLBAR

TOXICITY DATA with REFERENCE:

orl-man TDLo:226 mg/kg AIMDAP 132,891,73

orl-rat LD50:375 mg/kg FMCHA2 -,C34,89

OSHA PEL: TWA 0.5 mg(Ba)/m³

ACGIH TLV: TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 0.5 mg(Ba)/m³

SAFETY PROFILE: Poison by ingestion. Human systemic effects by ingestion: flaccid paralysis without anesthesia, muscle weakness, and dyspnea. When heated to decomposition it emits toxic fumes of SO_x and Ba.

BAO400 CAS: 22708-05-0 HR: 3
BARIUM REINECKATE
mf: C₄H₆CrN₆S₄•1/2Ba

SYNS: CHROMATE(1-), DIAMMINETETRAKIS (ISOTHIO CYANATO)-, BARIUM □ CHROMATE(1-), DIAMMINETE TRAKIS(THIOCYANATO-N)-, BARIUM, (OC-6-11)-

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:100 mg/kg NCNSA6 5,27,1953

orl-rat LD :>500 mg/kg NCNSA6 5,27,1953

SAFETY PROFILE: A poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x, SO_x, Cr, and Ba.

BAO500 HR: 3
BARIUM RHODANIDE
mf: BaC₆H₄O₂N₂S₄ mw: 401.6

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison. Explosive. When heated to decomposition it can emit highly toxic fumes of SO_x and NO_x. See also BARIUM COMPOUNDS.

BAO750 CAS: 17125-80-3 HR: 3
BARIUM SILICOFLUORIDE
mf: F₆Si•Ba mw: 279.43

PROP: White or colorless rhombohedral crystalline powder. D: 4.29 @ 21°/4°, mp: 300° (decomp). Decomp on heating to form SiF₄ and BaF₂. Sltly sol in H₂O. Insol in EtOH.

SYNS: BARIUM FLUOROSILICATE □ BARIUM FLUOSILICATE □ BARIUM HEXAFLUOROSILICATE □ BARIUM HEXAFLUOROSILICATE(2-) □ BARIUMSILICOFLUORID □ BARIUM SILICON FLUORIDE □ SILICATE(2-), HEXAFLUORO-, BARIUM □ SILICATE(2-), HEXAFLUORO-, BARIUM (1:1) (9CI) □ SILICON FLUORIDE BARIUM SALT

TOXICITY DATA with REFERENCE:

orl-rat LD50:175 mg/kg AFDOAQ 15,122,51

orl-rbt LDLo:175 mg/kg JPETAB 39,246,30

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg(Ba)/m³; TWA 2.5 mg(F)/m³

ACGIH TLV: TWA 0.5 mg(Ba)/m³; Not Classifiable as a Human Carcinogen; TWA 2.5 mg(F)/m³; BEI: 3 mg/g creatinine of fluorides in urine prior to shift; 10 mg/g creatinine of fluorides in urine at end of shift.

DFG MAK: 0.5 mg(Ba)/m³

NIOSH REL: (Fluorides, Inorganic) TWA 2.5 mg(F)/m³

DOT CLASSIFICATION: 6.1; Label: KEEP AWAY FROM FOOD

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic fumes of F⁻. See also BARIUM COMPOUNDS (soluble).

BAO825 CAS: 6865-35-6 HR: 2
BARIUM STEARATE
mf: C₃₆H₇₂O₄•Ba mw: 706.42

PROP: Cream to white solid, odorless. Mp: 120°, d: 1.2. Slt sol in water.

SYNS: BARIUM DISTEARATE □ OCTADECANOIC ACID, BARIUM SALT (9CI) □ STAVINOR 40 □ STEARIC ACID, BARIUM SALT

TOXICITY DATA with REFERENCE:

orl-rat LD50:4 g/kg GISAAA 39(11),91,74

orl-mus LD50:3500 mg/kg GISAAA 39(11),91,74

orl-gpg LD50:3600 mg/kg GISAAA 39(11),91,74

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and fumes. See also BARIUM COMPOUNDS.

BAO900 CAS: 20236-55-9 HR: 3
BARIUM STYPHNATE

DOT: NA 0473

SYNS: 1,3-BENZENEDIOL, 2,4,6-TRINITRO-, BARIUM SALT, HYDRATE (2:1:1) □ RESORCINOL, 2,4,6-TRINITRO-, BARIUM SALT, HYDRATE (2:1:1)

DOT CLASSIFICATION: Explosive 1.1A; Label: Explosive 1.1A

SAFETY PROFILE: An explosive. When heated to decomposition it emits toxic vapors of NO_x and fumes of Ba.

BAP000 CAS: 7727-43-7 HR: 2
BARIUM SULFATE

mf: O₄S•Ba mw: 233.40

PROP: White, heavy, orthorhombic, odorless powder or crystals. Undergoes orthorhombic to monoclinic phase transition at 11°. D: 4.50 @ 15°, mp: 1580°. Sltly sol in H₂O. Insol in water or dilute acids.

SYNS: ACTYBARYTE □ ARTIFICIAL BARITE □ ARTIFICIAL HEAVY SPAR □ BAKONTAL □ BARIDOL □ BARITE □ BARITOP □ BAROSPERSE □ BAROTRAST □ BARYTA WHITE □ BARYTES □ BAYRITES □ BLANC FIXE □ C.I. 77120 □ C.I. PIGMENT WHITE 21 □ CITOBARYUM □ COLONATRAST □ ENAMEL WHITE □ ESOPHOTRAST □ EWEISS □ E-Z-PAQUE □ FINEMEAL □ LACTOBARYT □ LIQUIBARINE □ MACROPAQUE □ NEOBAR □ ORATRAST □ PERMANENT WHITE □ PRECIPITATED BARIUM SULPHATE □ RAYBAR □ REDI-FLOW □ SOLBAR □ SULFURIC ACID, BARIUM SALT (1:1) □ SUPRAMIKE □ TRAVAD □ UNIBARYT

TOXICITY DATA with REFERENCE:

mnt-mus-ipr 12,500 µg/kg GWZHEW 12,77,86

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: Total Dust: TWA 10 mg/m³; Respirable Fraction: 5 mg/m³

ACGIH TLV: TWA (nuisance particulate) 10 mg/m³ of total dust (when toxic impurities are not present, e.g., quartz <1%)

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. A relatively insoluble salt used as an opaque medium in radiography. Soluble impurities can lead to toxic reactions. Heating with aluminum can produce an explosion. Incompatible with aluminum and potassium. When heated to decomposition it emits toxic fumes of SO_x.

BAP250 CAS: 21109-95-5 HR: 3
BARIUM SULFIDE

mf: BaS mw: 169.4

PROP: Cubic, colorless crystals. Moisture-sensitive. D: 4.25 @ 15°, mp: 1200°.

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison. Flammable by spontaneous chemical reaction, air, moisture, or acid fumes may cause it to ignite. For explosion and disaster hazards, see SULFIDES. To fight fire, use CO₂, dry chemical. Reacts violently with phosphorus(V) oxide. Mixtures with lead dioxide, potassium chlorate, or potassium nitrite explode when heated. Incompatible with Cl₂O, Ca(NO₃)₂, Sr(NO₃)₂, Ca(ClO₃)₂, Sr(ClO₃)₂, (ClO₃)₂.

See also BARIUM COMPOUNDS (soluble) and SULFIDES.

BAP260 CAS: 8077-30-3 HR: 2
BARIUM SULFIDE, mixture with SULFUR

SYNS: NEOPOL (FUNGICIDE) □ SULFUR, mixture with BARIUM SULFIDE

TOXICITY DATA with REFERENCE:

orl-rat LD50:640 mg/kg ATXKA8 27,106,1971

SAFETY PROFILE: Moderately toxic by ingestion.

When heated to decomposition it emits toxic vapors of Ba and SO_x.

BAP300 HR: 3
BARIUM THIOCYANATE

mf: C₂BaN₂S₂ mw: 253.52

CONSENSUS REPORTS: Barium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A deadly poison. Incompatible with potassium chlorate, sodium nitrate. When heated to decomposition it emits toxic fumes of SO_x and NO_x. See also BARIUM COMPOUNDS and THIOCYANATES.

BAP500 CAS: 12009-31-3 HR: 1
BARIUM TITANATE(IV)

mf: Ba•O₉Ti₄ mw: 472.94

SYNS: BARIUM TETRATITANATE □ BARIUM TITANIUM OXIDE □ TITANATE, BARIUM (1:1) □ TRANS-TECH D 38 □ TRANS-TECH D 8512

TOXICITY DATA with REFERENCE:

orl-rat LD :>15 g/kg GISAAA 39(6),102,74

SAFETY PROFILE: Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of Ba and Ti.

BAP502 CAS: 12047-27-7 HR: 2
BARIUM TITANATE(IV)

mf: BaO₃Ti mw: 233.24

PROP: White powder, odorless. Mp: 1654C°. Insoluble in water.

SYNS: BARIUM METATITANATE □ BARIUM TITANIUM OXIDE □ BARIUM TITANIUM TRIOXIDE □ BT 201 □ BT 204 □ BT 303 □ HBT 3 □ HPBT 1 □ KYORIX BT-S □ TITANATE BARIUM (1:1) □ VK 4 □ VK 4 (OXIDE) □ YV 100AN

TOXICITY DATA with REFERENCE:

orl-rat LD50:>12 g/kg IMSUAI 31,302,62

ipr-rat LD50:3 g/kg IMSUAI 31,302,62

SAFETY PROFILE: Moderately toxic by intraperitoneal route. Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of Ba and Ti.

BAP750 CAS: 12009-21-1 HR: 2
BARIUM ZIRCONIUM(IV) OXIDE

mf: O₄Zr₄•Ba mw: 566.22

PROP: Light gray-buff powder or white powder. D: 5.52, mp: 2510°. Insol in water and alkalies; sltly sol in acid. IDLH 50 mg/m³ (as Zr).

SYNS: BARIUM ZIRCONATE □ BARIUM ZIRCONIUM OXIDE □ BARIUM ZIRCONIUM TRIOXIDE □ ZIRCONATE, BARIUM (1:1)

TOXICITY DATA with REFERENCE:

orl-rat LD50:1980 mg/kg AIHAAP 24,131,63
 ipr-rat LD50:420 mg/kg AIHAAP 24,131,63

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Barium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³

ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³

DFG MAK: 1 mg(Zr)/m³

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. Inhalation produces interstitial pneumonitis. See also ZIRCONIUM COMPOUNDS and BARIUM COMPOUNDS.

BAP800 CAS: 12069-68-0 HR: 1
BASIC COBALT CARBONATE

mf: CH₂Co₂O₅ mw: 211.89

SYNS: (CARBONATO)DIHYDROXYDICOBALT □ CARBONIC ACID, COBALT COMPLEX □ COBALT CARBONATE HYDROXIDE (CO₂CO₃(OH)₂) □ COBALT, (CARBONATO)DIHYDROXYDI-(8CI) □ COBALT, (MU-(CARBONATO(2-)-O- O'))-DIHYDROXYDI □ COBALT(II) CARBONATE HYDROXIDE (1:1)

CONSENSUS REPORTS: IARC Cancer Review: Group 2B IMEMDT 52,363,91; Human Inadequate Evidence IMEMDT 52,363,91.

SAFETY PROFILE: Questionable carcinogen. When heated to decomposition it emits toxic vapors of Co.

BAP802 CAS: 51839-24-8 HR: 1
BASIC COBALT CARBONATE

mf: C₂H₆Co₅O₁₂•H₂O mw: 534.75

PROP: Grayish powder. Mp: 1935°. Insoluble in water.

SYNS: CARBONIC ACID, COBALT(2+) SALT, BASIC □ COBALT, BIS(CARBONATO(2-))HEXAHYDROXYPENTA-, MONOHYDRATE □ COBALT(II)CARBONATE HYDROXIDE (2:3) MONOHYDRATE □ COBALTOUS CARBONATE, BASIC

CONSENSUS REPORTS: IARC Cancer Review: Group 2B IMEMDT 52,363,91; Human Inadequate Evidence IMEMDT 52,363,91.

SAFETY PROFILE: Questionable carcinogen. When heated to decomposition it emits toxic vapors of Co.

BAQ250 CAS: 65-61-2 HR: 3
BASIC ORANGE 3RN

mf: C₁₇H₁₉N₃•ClHZNCl₂ mw: 438.12

PROP: Mp: 182°.

SYNS: ACRIDINE ORANGE □ ACRIDINE ORANGE NO □ ACRIDINE ORANGE R □ C.I. 46005 □ C.I. BASIC ORANGE 14 □ RHODULINE ORANGE NO □ N,N,N',N'-TETRAMETHYL-3,6-ACRIDINEDIAMINE MONOHYDROCHLORIDE (9CI)

TOXICITY DATA with REFERENCE:

dnd-mus:ast 20 µmol/L BBACAQ 374,96,74

dnd-mam:lym 10 pph BIPMAA 11,253,72

dnd-sal:spr 40 µmol/L BBRCA9 40,123,70

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory. Zinc and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits very toxic fumes of HCl, Cl⁻, and NO_x. See also ZINC COMPOUNDS.

BAQ750 CAS: 14097-03-1 HR: D
BASIC RED 18

mf: C₁₉H₂₅ClN₅O₂ mw: 390.94

SYNS: AIZEN CATHILON RED GTLH □ AMMONIUM, (2-(p-(2-CHLORO-4-NITROPHENYL)AZO)PHENETHYLAMINO-)ETHYL)TRIMETHYL- □ ASTRAZON RED GTL □ C.I. 11085 □ C.I. BASIC RED 18 □ DIACRYL SUPRA RED GTL □ NOVACRYL RED 2G □ RED GTL □ SEVRON RED GL □ SUMIACRYL RED G □ SUMIACRYL RED GT □ SYNACRYL FAST RED 2G □ SYNACRYL RED 2G

TOXICITY DATA with REFERENCE:

mno-sat 100 µg/plate MUREAV 68,307,79

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits very toxic fumes such as Cl⁻ and NO_x.

BAR250 CAS: 8015-73-4 HR: 2
BASIL OIL

PROP: Contains about 55% methyl chavicol and 35% of alcohols calculated as lenatoal and other compounds found in the leaves of *Ocimum resiliun* L. (FCTXAR 11,855,73). A pale-yellow liquid; floral, spicy odor. Sol in fixed oils and propylene glycol; insol in glycerin.

SYNS: BASIL OIL, EUROPEAN TYPE (FCC) □ BASIL OIL, SWEET □ OCIMUM BASILICUM OIL □ OIL OF BASIL □ OILS, BASIL

TOXICITY DATA with REFERENCE:

skn-mus 100% MLD FCTXAV 11,867,73

orl-rat LD50:1400 mg/kg FCTXAV 11,855,73

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. A skin and eye irritant. When heated to decomposition it emits acrid smoke and irritating fumes.

BAR275 HR: D
BASIL OIL, COMOROS TYPE

PROP: From steam distillation of *Ocimum basilicum* L. Light yellow liquid; spicy odor. Sol in fixed oils, mineral oil; sltly sol in propylene glycol; insol in glycerin.

SYNS: BASIL OIL EXOTIC □ BASIL OIL, REUNION TYPE

SAFETY PROFILE: When heated to decomposition it emits acrid smoke and irritating fumes.

BAR325 HR: 2
BASKET FLOWER

PROP: Bulb-producing ornamental plants. The long, thin leaves emerge from the ground not from a stem. The flowers are white or yellow and grow from a leafless stem. The seeds are carried in a capsule. They are native to the southeastern United States and tropical areas of the Americas, and are commonly cultivated.

SYNS: ALLIGATOR LILY □ CROWN BEAUTY □ HYMENO-CALLIS (VARIOUS SPECIES) □ LIRIO (SPANISH) □ SEA DAFFODIL □ SPIDER LILY □ TARARACO BLANCO (CUBA)

SAFETY PROFILE: The bulb contains the poison lycorine and similar alkaloids. Ingestion of large amounts may cause nausea, vomiting, and diarrhea.

BAR500 HR: 2**BASORA CORRA**

PROP: Aqueous extract from the root of the plant (JNCIAM 52,445,74).

SYN: MELOCHIA TOMENTOSA

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data.

BAR750 CAS: 23509-16-2 HR: 3**BATRACHOTOXIN**

mf: $C_{31}H_{42}N_2O_6$ mw: 538.75

PROP: Noncrystal. Active principle from the skin of the Columbian arrow poison frog.

SYNS: 20-(2,4-DIMETHYL-1H-PYRROLE-3-CARBOXYLATE) BATRACHOTOXININ A □ 20- α -(2,4-DIMETHYL-1H-PYRROLE-3-CARBOXYLATE) BETRACHOTOXININ A

TOXICITY DATA with REFERENCE:

ipr-mus LD50:2 μ g/kg TOXIA6 7,315,69

scu-mus LD50:2 μ g/kg CTOXAO 4,331,71

ivn-mus LDLo:2700 ng/kg TOXIA6 8,85,70

SAFETY PROFILE: A deadly poison by intraperitoneal, intravenous, and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x .

BAR800 CAS: 41621-49-2 HR: 3**BATRAFEN**

mf: $C_{12}H_{17}NO_2 \cdot C_2H_5NO$ mw: 268.40

PROP: Broad-spectrum anti-fungal agent.

SYNS: 2-AMINOETHANOL compounded with 6-CYCLOHEXYL-1-HYDROXY-4-METHYL-2(1H)-PYRIDINONE (1:1) □ CIC □ CICLOPIROX ETHANOLAMINE SALT (1:1) □ CICLO PIROXOL-AMIN □ CICLOPIROXOLAMINE □ 6-CYCLOHEXYL-1-HYDROXY-4-METHYL-2(1H)-PYRIDINONE compounded with 2-AMINOETHANOL (1:1) □ 6-CYCLOHEXYL-1-HYDROXY-4-METHYL-2(1H)-PYRIDON, 2-AMINOETHANOL-SALZ (GERMAN) □ 6-CYCLOHEXYL-1-HYDROXY-4-METHYL-2(1H)-PYRIDONE, 2-AMINOETHANOL-SALT □ 6-CYCLOHEXYL-1-HYDROXY-4-METHYL-2(1H)-PYRIDONE ETHANOLAMINE SALT □ HOE 296 □ LORPOX □ TERIT

TOXICITY DATA with REFERENCE:

orl-rat LD50:2350 mg/kg IYKEDH 8,107,77

ipr-rat LD50:146 mg/kg OYYAA2 9,57,75

scu-rat LD50:9800 mg/kg YKYUA6 28,115,77

ivn-rat LD50:72 mg/kg IYKEDH 8,107,77

orl-mus LD50:1740 mg/kg IYKEDH 8,107,77

ipr-mus LD50:83 mg/kg OYYAA2 9,57,75

scu-mus LD50:1730 mg/kg IYKEDH 8,107,77

ivn-mus LD50:71 mg/kg OYYAA2 9,57,75

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion and subcutaneous routes. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x .

BAR825 CAS: 64314-28-9 HR: 3**BAUMYCIN A1**

mf: $C_{34}H_{43}NO_{13}$ mw: 673.78

PROP: Orange-red crystals. Mp: 182–185°.

TOXICITY DATA with REFERENCE:

pic-esc 50 ng/plate CNREA8 43,2819,83

dni-mus:leu 1700 nmol/L JANTAJ 34,1596,81

oms-mus:leu 560 nmol/L JANTAJ 34,1596,81

ipr-mus LD50:1500 μ g/kg JANTAJ 31,78-67,78

SAFETY PROFILE: Poison by intraperitoneal route.

Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x .

BAR830 CAS: 64253-71-0 HR: 3**BAUMYCIN A2**

mf: $C_{34}H_{43}NO_{13}$ mw: 673.78

PROP: Orange-red crystals. Mp: 185–189°.

TOXICITY DATA with REFERENCE:

pic-esc 50 ng/plate CNREA8 43,2819,83

dni-mus:leu 1900 nmol/L JANTAJ 34,1596,81

oms-mus:leu 710 nmol/L JANTAJ 34,1596,81

ipr-mus LD50:15 mg/kg JANTAJ 31,78-68,78

SAFETY PROFILE: Poison by intraperitoneal route.

Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x .

BAR900 CAS: 1318-16-7 HR: 1**BAUXITE**

mf: $Al_2O_3 \cdot xH_2O$ mw: 228.10

PROP: Buff to orange solid, odorless. D: 3.7. Insol in water.

SYNS: FLORITE □ POROCEL □ POROCEL O

TOXICITY DATA with REFERENCE:

ihl-hmn TClO:22 mg/m³/5Y GTPZAB 4,28,60

SAFETY PROFILE: A nuisance dust. Human systemic effects by inhalation: fibrosis, focal (pneumoconiosis).

BAS000 CAS: 7682-90-8 HR: 3**BAY 75546**

mf: $C_{12}H_{17}BrN_3O_3PS$ mw: 394.26

SYN: 3-BROMO-5,7-DIMETHYL PYRAZOLYL-2-PYRIMIDINEPHOSPHOROTHIOIC ACID-O,O-DIETHYL ESTER

TOXICITY DATA with REFERENCE:

orl-rat LD50:2000 mg/kg TXAPA9 21,315,72

orl-bwd LD50:2400 μ g/kg TXAPA9 21,315,72

SAFETY PROFILE: Poison by ingestion. When heated to decomposition it emits very toxic fumes of Br^- , NO_x , PO_x , and SO_x . See also ESTERS.

BAS500 CAS: 39457-24-4 HR: 3**BAY COE 3664****TOXICITY DATA with REFERENCE:**

orl-bwd LD50:2400 μ g/kg TXAPA9 26,154,73

skn-bwd LD50:2400 μ g/kg TXAPA9 26,154,73

SAFETY PROFILE: Poison by ingestion and skin contact.

BAT000 CAS: 145-63-1 HR: 2**BAYER 205**

mf: $C_{51}H_{40}N_6O_{23}S_6$ mw: 1297.33

PROP: Pinkish-white, hygroscopic powder. Very sol in H_2O ; insol in EtOH.

SYNS: ANTRYPOL □ BELGANYL □ CARBANILIDE, 3,3'-BIS((5-((4,6,8-TRISULFO-1-NAPHTHYL)CARBAMOYL)-o-TOLYL)-CARBAMOYL)- □ FARMA □ FARMA 939 □ FOURNEAU □ FOURNEAU 309 □ GERMANIN □ NAGANOL □ NAPHURIDE □ SURAMIN □ SURAMINE

TOXICITY DATA with REFERENCE:

ivn-man TDLo:46 mg/kg/5W-I:EYE NEJMAG
314,1455,86

ivn-mus LD50:620 mg/kg ADVPA3 15,289,78

SAFETY PROFILE: Moderately toxic by intravenous route. Human systemic effects by intravenous route: eye effects. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.

BAT500**HR: 2****BAY OIL**

PROP: Consists mainly of eugenol and chavicol (55–65%), major portion of balance consists of terpenes (α-pinene, myrcene, and dipentene), small quantities of citrol, nerol, cineol, and other terpenoids have also been found (FCTXAV 11,855,73). Yellow or brown liquid; aromatic odor, pungent, spicy taste. Sol in alc and glacial acetic acid.

SYNS: BAY LEAF OIL □ BOIS d'INDE □ LAUREL LEAF OIL □ MYRCIA OIL □ MYRCIA OIL □ OIL OF BAY □ OIL OF MYRCIA

TOXICITY DATA with REFERENCE:

orl-rat LD50:1800 mg/kg FCTXAV 11,855,73

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke.

BAT750**CAS: 14816-18-3****HR: 3****BAYTHION**

mf: C₁₂H₁₅N₂O₃PS mw: 298.32

PROP: Liquid. D: 1.176° @ 20 mm, fp: 5–6°, bp: 102° @ 0.01 mm (decomp).

SYNS: B 77488 □ BAY 5621 □ BAY 77488 □ BAYRE 77488 □ BENZOYL CYANIDE-*o*-(DIETHOXYPHOSPHINOTHIOYL)-OXIME □ *O,O*-DIAETHYL-*o*-(α-CYANBENZYLIDEN-AMINO)-THIONPHOSPHAT (GERMAN) □ *O,O*-DIAETHYL-*o*-(α-CYANOBENZYLIDENAMINO)-MONOTHIOPHOSPHAT (GERMAN) □ α-(((DIETHOXYPHOSPHINOTHIOYL)OXY)IMINO)BENZENE-ACETONITRILE □ (DIETHOXY-THIOPHOSPHORYLOXY-IMINO)-PHENYL ACETONITRILE □ *O,O*-DIETHYL PHOSPHORO THIOATE, *o*-ESTER with PHENYLGLYOXYLO NITRILE OXIME □ ENT 27,488 □ 4-ETHOXY-7-PHENYL-3,5-DIOXA-6-AZA-4-PHOSPHAOCT-6-ENE-8-NITRILE-4-SULFIDE □ PHENYL GLYOXYLONITRILE OXIME-*O,O*-DIETHYL PHOSPHORO THIOATE □ PHOXIME □ PHOXIN □ SEBACIL □ VALEXONE □ VOLATON

TOXICITY DATA with REFERENCE:

orl-rat LD50:300 mg/kg FAATDF 7,299,86

skn-rat LD50:1000 mg/kg 28ZEAL 5,181,76

orl-mus LD50:1050 mg/kg 52OLAC -,230,83

orl-dog LD50:250 mg/kg 28ZEAL 5,181,76

orl-cat LD50:250 mg/kg 28ZEAL 5,181,76

orl-rbt LD50:250 mg/kg 85DPAN -,71/76

CONSENSUS REPORTS: Cyanide and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Poison by ingestion. An experimental teratogen. When heated to decomposition it emits very toxic fumes of CN⁻, NO_x, PO_x, and SO_x. See also NITRILES.

BAT795**CAS: 7548-44-9****HR: D****BDH 2700**

mf: C₂₂H₂₇ClO₂ mw: 358.94

SYNS: 21-CHLORO-3,17-DIMETHOXY-19-NOR-17-α-PREGN-1,3,5(10)-TRIEN-20-YNE □ 17-α-CHLOROETHYNYL-3,17-β-DIMETHOXY-OESTRA-1,3,5(10)-TRIENE

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits toxic fumes of Cl⁻.

BAT800**CAS: 7548-46-1****HR: D****BDH 6140**

mf: C₂₂H₂₇BrO₂ mw: 403.40

SYN: 21-BROMO-3,17-DIMETHOXY-19-NOR-17-α-PREGNA-1,3,5(10)-TRIEN-20-YNE

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits toxic fumes of Br⁻.

BAT830**CAS: 63428-82-0****HR: 3****BEAUVERIN**

SYNS: BEAUVERIA BASSIANA □ BOVERIN □ BOVERINE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:128 mg/kg CYLPDN 6,213,85

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits acrid smoke and irritating vapors.

BAT850**CAS: 8021-39-4****HR: 3****BEECHWOOD CRESOATE**

PROP: Yellowish, greasy, liquid with smokey odor and sharp burned taste. Relatively sol in water.

SYNS: CRESOATE, WOOD □ RCRA WASTE NUMBER U051

TOXICITY DATA with REFERENCE:

orl-rat TDLo:52,416 mg/kg/91D-C OYYAA2 21,899,81

orl-rat TDLo:210 g/kg/96W-C OYYAA2 28,925,84

orl-mus TDLo:197 g/kg/91D-C OYYAA2 21,899,81

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Confirmed carcinogen. When heated to decomposition it emits acrid smoke and irritating fumes.

BAU000**CAS: 8012-89-3****HR: 1****BEESWAX**

PROP: Yellow to brownish-yellow, soft to brittle wax.

Mp: 62–65°, d: 0.95–0.96. Sol in chloroform, ether, fixed oils; sltly sol in alc.

SYNS: BEESWAX, WHITE □ BEESWAX, YELLOW

SAFETY PROFILE: A mild allergen. Combustible when heated.

BAU250**HR: 2****“BEETLE”**

PROP: Urea-formaldehyde condensation product.

SAFETY PROFILE: A mild irritant by inhalation. An allergen. Inhalation of dust may cause allergic response or irritation of lungs. Combustible. See also FORMALDEHYDE.

BAU255 CAS: 39543-79-8 HR: 3**BEFUNOLOL HYDROCHLORIDE**mf: $C_{16}H_{21}NO_4 \cdot ClH$ mw: 327.84**PROP:** Liquid eye medication.**SYNS:** 2-ACETYL-7-(2-HYDROXY-3-ISOPROPYLAMINO)-PROPOXYBENZOFURAN HYDROCHLORIDE □ BENTOX □ BFE 60 □ 1-(7-(2-HYDROXY-3-(1-METHYLETHYL)AMINO)-PROPOXY)-2-BENZOFURANYL)ETHANONE HYDROCHLORIDE**TOXICITY DATA with REFERENCE:**

orl-rat LD50:922 mg/kg KSRNAM 13,4138,79

ipr-rat LD50:182 mg/kg IYKEDH 14,484,83

scu-rat LD50:498 mg/kg IYKEDH 14,484,83

orl-mus LD50:950 mg/kg IYKEDH 14,484,83

ipr-mus LD50:184 mg/kg IYKEDH 14,484,83

scu-mus LD50:434 mg/kg IYKEDH 14,484,83

ivn-mus LD50:65 mg/kg IYKEDH 14,484,83

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion and subcutaneous routes. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x and HCl. A beta-adrenergic blocker.**BAU270 CAS: 4696-76-8 HR: 3****BEKANAMYCIN**mf: $C_{18}H_{37}N_5O_{10}$ mw: 483.60**PROP:** Crystals. Mp: 178–182° (decomp).**SYNS:** AMINODEOXYKANAMYCIN □ 2'-AMINO-2'-DEOXYKANAMYCIN □ KANAMYCIN B □ KANENDOMYCIN □ KDM □ NEBRAMYCIN FACTOR 5 □ NEBRAMYCIN V □ NK 1006 □ o-3-AMINO-3-DEOXY- α -d-GLUCOPYRANOSYL-(1-4)-o-(2,6-DIAMINO-2,6-DIDEOXY)- α -d-GLUCOPYRANOSYL-(1-6)-2-DEOXY-d-STREPTAMINE**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:800 mg/kg 85GDA2 1,159,80

scu-mus LD50:750 mg/kg 85GDA2 1,159,80

ivn-mus LD50:132 mg/kg JANTAJ 27,677,74

CONSENSUS REPORTS: EPA Genetic Toxicology Program.**SAFETY PROFILE:** Poison by intravenous route. Moderately toxic by intraperitoneal and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x .**BAU325 HR: 2****BELGENINE****PROP:** Extracted from *Mallotus japonicus merel arg* (NIIRDN 6,768,82).**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:3040 mg/kg NIIRDN 6,768,82

ivn-rat LD50:2800 mg/kg NIIRDN 6,768,82

ipr-mus LD50:6410 mg/kg NIIRDN 6,768,82

ivn-mus LD50:5400 mg/kg NIIRDN 6,768,82

SAFETY PROFILE: Moderately toxic by intraperitoneal and intravenous routes.**BAU500 HR: 3****BELLADONNA****PROP:** An extract from the deadly nightshade plant. The alkaloids atropine and belladonnine are derivatives.**SYN:** DEADLY NIGHTSHADE**SAFETY PROFILE:** A deadly poison. See also HYOSCYAMINE and ATROPINE. Local contact may cause a contact dermatitis. A poisonous constituent of some berries and plants, and of some folk remedies.**BAU750 CAS: 147-24-0 HR: 3****BENADRYL HYDROCHLORIDE**mf: $C_{17}H_{21}NO \cdot ClH$ mw: 291.85**PROP:** Crystals from EtOH/Et₂O. Mp: 161–162°. Sol in H₂O.**SYNS:** AMBENYL □ BAX □ BENA □ BENADRYL □ BENDYLATE □ BENOCTEN □ BENZEHIST □ BENZHY DRAMINE HYDROCHLORIDE □ 2-(BENZHY DRYLOXY)-N,N-DIMETHYLETHYLAMINEHYDRO CHLORIDE □ DABYLEN □ DIFENHYDRAMINE HYDRO CHLORIDE □ DIMETHYLAMINE BENZHYDRYL ESTER HYDROCHLORIDE □ β -DIMETHYL AMINOETHYL BENZHYDRYL ESTER HYDROCHLORIDE □ DIPHENYL HYDRAMINE HYDROCHLORIDE □ 2-(DIPHENYL METHOXY)-N,N-DIMETHYL-ETHANAMINE HYDROCHLORIDE □ 2-DIPHENYLMETHOXY-N,N-DIMETHYLETHYL-AMINE HYDROCHLORIDE □ DOLESTAN □ ELDADRYL □ FELBEN □ FENYLHIST □ HALBMOND □ α -HYDROXY-DIPHENYL METHANE- β -DIMETHYLAMINOETHYL ETHER HYDRO CHLORIDE □ NCI-C56075 □ ROHYDRA □ SK-DIPHEN HYDRAMINE □ VALDRENE □ WEHYDRYL**TOXICITY DATA with REFERENCE:**orl-cld TDLo:12,500 μ g/kg:BAH,CVS JOPDAB 90,1017,77orl-man TDLo:10,714 μ g/kg:CNS,BAH,BPR AJEMEN 4,369,86

skn-cld TDLo:60 mg/kg/6H-I:EYE,PSY CPEDAM 25,163,86

orl-rat LD50:500 mg/kg NIIRDN 6,334,82

ipr-rat LD50:82 mg/kg JPETAB 102,250,51

scu-rat LD50:201 mg/kg YKKZAJ 81,261,61

ivn-rat LD50:35 mg/kg YACHDS 12,2769,84

orl-mus LD50:114 mg/kg JPETAB 113,72,55

ipr-mus LD50:56 mg/kg JPETAB 112,318,54

scu-mus LD50:99,200 μ g/kg NYKZAU 54,33,58

ivn-mus LD50:20 mg/kg ARZNAD 5,72,55

ivn-dog LD50:24 mg/kg JPETAB 89,227,47

CONSENSUS REPORTS: Reported in NTP Carcinogenesis Studies (feed); Equivocal Evidence: rat NTPTR* NTP-TR-355,89; (feed); No Evidence: mouse NTPTR* NTP-TR-355,89.**SAFETY PROFILE:** Poison by ingestion, subcutaneous, intravenous, and intraperitoneal routes. Human systemic effects by ingestion or skin contact: arrhythmias, ataxia, blood pressure elevation, convulsions, distorted perceptions, eye effects, and hallucinations. Experimental teratogenic and reproductive effects. Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of NO_x and HCl. See also ESTERS and ETHERS.**BAV000 CAS: 3813-05-6 HR: 2****BENAZOLIN**mf: $C_9H_6O_3NCIS$ mw: 243.6**PROP:** White, crystalline solid. Mp: 193°. Sltly sol in H₂O.**SYNS:** BEN-30 □ BENAZALOX □ BEN-CORNOX □ BENOPAN □ BENSECAL □ BENZAR □ 4-CHLORO-2-OXO-3(2H)-BENZO-THIAZOLEACETIC ACID □ 4-CHLORO-2-OXOBENZO

THIAZOLIN-3-YL ACETIC ACID □ CORNOX CWK □
 CRESOPUR □ EUNASIN □ EX10781 □ GALIPAN □ GERBITOX
 □ GRASSLAND WEEDKILLER □ HERBAZOLIN □ KEROPUR □
 LEGUMEX EXTRA □ LEY-CORNOX □ LEYMIN □ METIZOLIN
 □ RD7693 □ TRI-CORNOX SPECIAL

TOXICITY DATA with REFERENCE:

orl-rat LD50:3000 mg/kg 85ARAE 2,26,77

SAFETY PROFILE: Moderately toxic by ingestion. An herbicide. When heated to decomposition it emits toxic fumes of SO_x, Cl⁻, and NO_x. See also CHLORIDES.

BAV250 CAS: 14286-84-1 HR: 3
BENCYCLANE FUMARATE

mf: C₁₉H₃₁NO•C₄H₂O₄ mw: 403.57

PROP: Crystals from EtOH (aq). Mp: 131–133°.

SYNS: BENCICLANE □ BENCYCLANE □ 3-((1-BENZYL-CYCLOHEPTYLOXY)-N,N-DIMETHYLPROPYLAMINE FUMARATE □ N-(3-(1-BENZYL-CYCLOHEPTYLOXY)-PROPYL)-N,N-DIMETHYL-AMMONIUM-HYDROGENFUMARAT (GERMAN) □ EGYT 201 □ FLUDILAT □ HALIDO

TOXICITY DATA with REFERENCE:

orl-rat LD50:414 mg/kg 27ZQAG -,383,72

ipr-rat LD50:86 mg/kg 27ZQAG -,383,72

scu-rat LD50:257 mg/kg 27ZQAG -,383,72

ivn-rat LD50:41 mg/kg 27ZQAG -,383,72

orl-mus LD50:446 mg/kg 27ZQAG -,383,72

ipr-mus LD50:132 mg/kg 27ZQAG -,383,72

scu-mus LD50:203 mg/kg 27ZQAG -,383,72

ivn-mus LD50:45 mg/kg AITEAT 15,415,67

ims-mus LD50:150 mg/kg AITEAT 15,415,67

orl-dog LDLo:300 mg/kg ARZNAD 20,1385,70

SAFETY PROFILE: Poison by ingestion, intramuscular, intraperitoneal, subcutaneous, and intravenous routes. When heated to decomposition it emits toxic fumes of NO_x.

BAV275 CAS: 53716-43-1 HR: D
BENDACORT

mf: C₃₇H₄₂N₂O₇ mw: 626.81

PROP: Needles from EtOH. Mp: 174–176°.

SYNS: AF 2071 □ 11-β,17-DIHYDROXY-21-(((1-PHENYL-METHYL)-1H-INDAZOL-3-YL)OXY)ACETILOXY)-PREGN-4-ENE-3,20-DIONE

SAFETY PROFILE: An experimental teratogen. When heated to decomposition it emits toxic fumes of NO_x.

BAV325 CAS: 20187-55-7 HR: 3
BENDAZOLIC ACID

mf: C₁₆H₁₄N₂O₃ mw: 282.32

PROP: Crystals from ethanol. Mp: 160°. Practically insol in water; sol in chloroform, acetone.

SYNS: AF 983 □ BENDAZAC □ ((1-BENZYL-1H-INDAZOL-3-YL)OXY)ACETIC ACID □ BINDAZAC □ ((1-(PHENYLMETHYL)-1H-INDAZOL-3-YL)OXY)-ACETIC ACID (9CI) □ VERSUS □ ZILDASAC

TOXICITY DATA with REFERENCE:

orl-rat LD50:1200 mg/kg MEIEDD 10,146,83

ipr-rat LD50:319 mg/kg IYKEDH 10,884,79

scu-rat LD50:714 mg/kg IYKEDH 10,884,79

ivn-rat LD50:304 mg/kg MEIEDD 10,146,83

orl-mus LD50:1105 mg/kg MEIEDD 10,146,83

ipr-mus LD50:339 mg/kg IYKEDH 10,884,79

scu-mus LD50:406 mg/kg IYKEDH 10,884,79

ivn-mus LD50:380 mg/kg MEIEDD 10,146,83

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.

BAV350 CAS: 8064-77-5 HR: 3
BENDECTIN

mf: C₁₉H₃₅NO₂•C₁₇H₂₂N₂O•C₈H₁₁NO₃•C₄H₆O₄•2ClH

mw: 940.18

SYNS: DEBENDOX □ LENOTAN

SAFETY PROFILE: Human reproductive effects by ingestion: developmental abnormalities of the gastrointestinal system. Human and experimental teratogenic and reproductive effects. When heated to decomposition it emits toxic fumes of NO_x and HCl.

BAV400 CAS: 91599-74-5 HR: 3
BENIDIPINE HYDROCHLORIDE

mf: C₂₈H₃₁N₃O₆•ClH mw: 542.08

SYNS: (+-)-BENIDIPINE HYDROCHLORIDE □ KW 3049 □ 3,5-PYRIDINEDICARBOXYLIC ACID, 1,4-DIHYDRO-2,6-DIMETHYL-4-(3-NITROPHENYL)-, METHYL 1-(PHENYLMETHYL)-3-PIPERIDINYL ESTER, MONOHYDROCHLORIDE, (R*,R*)-(+/-)-

TOXICITY DATA with REFERENCE:

orl-rat LD50:87,600 µg/kg KSRNAM 24,1045,90

ipr-rat LD50:15,100 µg/kg KSRNAM 24,1045,90

scu-rat LD50:276 mg/kg KSRNAM 24,1045,90

ivn-rat LD50:4400 µg/kg KSRNAM 24,1045,90

orl-mus LD50:322 mg/kg KSRNAM 24,1045,90

ipr-mus LD50:21,500 µg/kg KSRNAM 24,1045,90

scu-mus LD50:33,500 µg/kg KSRNAM 24,1045,90

ivn-mus LD50:2500 µg/kg KSRNAM 24,1045,90

orl-dog LDLo:29,300 µg/kg KSRNAM 24,1811,90

SAFETY PROFILE: A poison by ingestion, intraperitoneal, and intravenous routes. When heated to decomposition it emits toxic vapors of NO_x and HCl.

BAV500 HR: 2
BENLATE and SODIUM NITRITE

SYNS: 1-(BUTYLCARBAMOYL)-2-BENZIMIDAZOLECARBAMIC ACID METHYL ESTER and SODIUM NITRITE (1:6) □ SODIUM NITRITE and BENLATE

TOXICITY DATA with REFERENCE:

orl-mus TDLo:31 g/kg/26W-I:CAR NEOLA4 24,119,77

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits toxic fumes of Na₂O and NO_x. See also CARBAMATES, ESTERS, and NITRITES.

BAV575 CAS: 17804-35-2 HR: 3
BENOMYL

mf: C₁₄H₁₈N₄O₃ mw: 290.36

PROP: Very sltly sol in H₂O; sol in CHCl₃; less sol in other org solvents.

SYNS: ARILATE □ BBC □ BENLATE 50 □ BENOMYL 50W □ BNM □ 1-(BUTYLCARBAMOYL)-2-BENZIMIDAZOLECARBAMIC ACID, METHYL ESTER □ 1-(BUTYLCARBAMOYL)-2-BENZIMIDAZOL-METHYLCARBAMAT (GERMAN) □ 1-(N-BUTYLCARBAMOYL)-2-(METHOXY-CARBOXAMIDO)-BENZIMIDAZOL (GERMAN) □ DU PONT 1991 □ FUNDASOL □

FUNGICIDE 1991 □ MBC □ METHYL-1-(BUTYLCARBAMOYL)-2-BENZIMIDAZOLYLCARBAMATE □ TERSAN 1991

TOXICITY DATA with REFERENCE:

skn-man 0.1% MLD LANCAO 2,1252,80
 sln-smc 123 ppm ANYAA9 407,186,83
 sln-hmn:lym 10 mg/L MUREAV 121,139,83
 mmo-asn 250 µg/L MUREAV 91,115,81
 orl-rat LD50:10 g/kg JHEMA2 24,295,80
 ihl-rat LC50:>2 g/m³/4H PEMNDP 9,59,91
 skn-rat LD50:>1 g/kg WRPCA2 9,119,70
 orl-mus LD50:5600 mg/kg 17QLAD 12,85,77
 orl-mus LD50:5600 mg/kg 17QLAD 12,85,77
 orl-bwd LD50:100 mg/kg TXAPA9 21,315,72

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

OSHA PEL: Total Dust: TWA 10 mg/m³; Respirable Fraction: 5 mg/m³

ACGIH TLV: TWA 10 mg/m³; Not Classifiable as a Human Carcinogen

SAFETY PROFILE: Poison by ingestion. Mildly toxic by inhalation. Experimental teratogenic and reproductive effects. Human mutation data reported. A human skin irritant. When heated to decomposition it emits toxic fumes of NO_x. See also CARBAMATES.

**BAV600 CAS: 83055-99-6 HR: 2
BENSULFURON METHYL**

mf: C₁₆H₁₈N₄O₇S mw: 410.44

PROP: White to pale yellow, odorless solid. Mp: 185–188°, d: 1.41. Sol in water.

SYNS: BENZOIC ACID, 2-((((((4,6-DIMETHOXY-2-PYRIDINYL)AMINO)CARBONYL)AMINO)SULFONYL)METHYL)-, METHYL ESTER □ DPX-F 5384 □ F 5384 □ LONDAX

TOXICITY DATA with REFERENCE:

orl-rat LD50:>5 g/kg NNGADV 16,343,91
 ihl-rat LC50:>5 g/m³ NNGADV 16,343,91
 skn-rat LD50:>2 g/kg NNGADV 16,343,91
 orl-mus LD50:>10,985 mg/kg NNGADV 16,343,91
 skn-rbt LD50:>2 g/kg FMCHA2 -,C185,91
 orl-dck LD50:>2510 mg/kg PEMNDP 9,62,91

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x.

**BAV625 CAS: 29462-18-8 HR: 2
BENTAZEPAM**

mf: C₁₇H₁₆N₂OS mw: 296.41

PROP: Mp: 249–250°.

SYNS: 1,3,6,7,8,9-HEXAHYDRO-5-PHENYL-2H-(1)BENZO-THIENO(2,3-e)-1,4-DIAZEPIN-2-ONE □ QM-6008 □ 6,7-TETRAMETHYLENE-5-PHENYL-1,2-DIHYDRO-3H-THIENO(2,3-e)(1,4)DIAZEPIN-2-ONE □ THIADIPONE □ TIADIPONE

TOXICITY DATA with REFERENCE:

orl-rat LD50:2 g/kg ARZNAD 26,926,75
 orl-mus LD50:980 mg/kg ARZNAD 25,926,75
 ipr-mus LD50:630 mg/kg ARZNAD 25,926,75

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of SO_x and NO_x.

**BAV750 CAS: 1302-78-9 HR: 1
BENTONITE**

PROP: A clay containing appreciable amounts of the clay mineral montmorillonite; light yellow or green, cream, pink, gray to black solid. Insol in water and common org solvs.

SYNS: ALBAGEL PREMIUM USP 4444 □ BENTONITE 2073 □ BENTONITE MAGMA □ HI-JEL □ INVITE I.G.B.A. □ MAGBOND □ MONTMORILLONITE □ PANTHER CREEK BENTONITE □ SOUTHERN BENTONITE □ TIXOTON □ VOLCLAY □ VOLCLAY BENTONITE BC □ WILKINITE

TOXICITY DATA with REFERENCE:

ivn-rat LD50:35 mg/kg BSIBAC 44,1685,68

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route causing blood clotting. Questionable carcinogen with experimental tumorigenic data.

**BAW000 CAS: 7093-10-9 HR: 2
BENZ(1)ACEANTHRENE**

mf: C₂₀H₁₄ mw: 254.34

PROP: Pale-yellow plates from C₆H₆/Et₂O. Mp: 176.5–177°.

SYNS: 8:9-ACE-1:2-BENZANTHRACENE □ 1,2-DIHYDRO-BENZ(1)ACEANTHRYLENE □ 8:9-DIMETHYLENE-1:2-BENZANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and fumes.

**BAW125 CAS: 211-91-6 HR: D
BENZ(1)ACEANTHRYLENE**

mf: C₂₀H₁₂ mw: 252.32

PROP: Red crystals from C₆H₆/EtOH. Mp: 161.5–163°.

TOXICITY DATA with REFERENCE:

mma-sat 30 µg/plate CNREA8 44,4993,84
 cyt-mus:lym 2500 µg/L ENMUDM 8(Suppl 6),24,86
 msc-ham:lng 5 mg/L CNREA8 44,4993,84

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and fumes.

**BAW130 CAS: 203-33-8 HR: 2
BENZ(a)ACEANTHRYLENE**

mf: C₂₀H₁₂ mw: 252.32

SYNS: 1,2-BENZFLUORANTHENE □ 1,2-BENZFLUORANTHRENE □ BENZO(a)FLUORANTHENE □ 1,2-BENZOFLUORANTHENE □ DIBENZO(c,lm)FLUORENE

TOXICITY DATA with REFERENCE:

mic-sat 5 µg/plate ENMUDM 9,183,87

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data reported. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

**BAW150 CAS: 93673-39-3 HR: D
BENZ(j)ACEANTHRYLEN-10-OL**

mf: C₂₀H₁₂O mw: 268.32

SYN: 10-HYDROXYBENZ(j)ACEANTHRYLENE

TOXICITY DATA with REFERENCE:

mic-bac-sat 5 µg/plate MUREAV 287,181,93

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BAW250 CAS: 205-99-2 HR: 3
BENZ(e)ACEPHENANTHRYLENE

mf: C₂₀H₁₂ mw: 252.32

PROP: Needles from C₆H₆ or EtOH. Mp: 168°.

SYNS: 3,4-BENZ(e)ACEPHENANTHRYLENE □ 2,3-BENZ-FLUORANTHENE □ 3,4-BENZFLUORANTHENE □ BENZO(b)FLUORANTHENE □ BENZO(c)FLUORANTHENE □ 2,3-BENZOFUORANTHENE □ 3,4-BENZOFUORANTHENE □ 2,3-BENZOFUORANTHRENE □ B(b)F

TOXICITY DATA with REFERENCE:

mma-sat 31 nmol/plate CRNGDP 6,1023,85
 otr-ham:lng 100 µg/L TXCYAC 17,149,80
 sce-ham-ipr 900 mg/kg/24H MUREAV 66,65,79
 skn-mus TDLo:88 ng/kg/120W-I:CAR ARGEAR 50,266,80

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 2B IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 32,147,83; IMEMDT 3,69,73. EPA Genetic Toxicology Program.

ACGIH TLV: Suspected Carcinogen

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic and tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Polynuclear Aromatic Hydrocarbons (HPLC), 5506; (GC), 5515.

BAW500 CAS: 71-79-4 HR: 3
BENZACINE HYDROCHLORIDE

mf: C₁₈H₂₁O₃ClH mw: 403.28

PROP: Mp: 186–188°.

SYNS: BENZACIN □ BENZACINE □ BENZACIN HYDROCHLORIDE □ DIMETHYLAMINOETHYL BENZILATE, HYDROCHLORIDE □ β-DIMETHYLAMINOETHYL BENZILATE HYDROCHLORIDE □ 2-(DIMETHYLAMINO)ETHYL BENZILATE HYDROCHLORIDE □ DIMETHYLAMINOETHYL BENZYLATE HYDROCHLORIDE □ DIMETHYLAMINOETHYL DIPHENYLHYDROXYACETATE HYDROCHLORIDE □ HK-141

TOXICITY DATA with REFERENCE:

orl-rat LD50:1035 mg/kg JLCMAK 30,700,45
 ivn-rat LD50:30 mg/kg JLCMAK 30,700,45
 orl-mus LD50:281 mg/kg JLCMAK 30,700,45
 ipr-mus LD50:137 mg/kg PCJOAU 2,201,68
 ivn-mus LD50:40 mg/kg JLCMAK 30,700,45

SAFETY PROFILE: Poison by ingestion, intravenous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of HCl.

BAW750 CAS: 225-51-4 HR: 2
BENZ(c)ACRIDINE

mf: C₁₇H₁₁N mw: 229.29

PROP: Brilliant-yellow needles from C₆H₆/pet ether. Mp: 108°.

SYNS: 12-AZABENZ(a)ANTHRACENE □ B(c)AC □ 3,4-BENZACRIDINE □ 7,8-BENZACRIDINE (FRENCH) □ 3,4-

BENZOACRIDINE □ α-CHRYSIDINE □ α-NAPHTHACRIDINE □ RCRA WASTE NUMBER U016

TOXICITY DATA with REFERENCE:

mma-sat 1 nmol/plate GANNA2 70,749,79
 sce-ham:ovr 10 µmol/L MUREAV 118,103,83
 sce-ham:lng 1 µmol/L MUREAV 118,103,83

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 3,241,73; Animal Limited Evidence IMEMDT 32,129,83

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic and tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BAX000 CAS: 3123-27-1 HR: 2
BENZ(c)ACRIDINE-7-CARBONITRILE

mf: C₁₈H₁₀N₂ mw: 254.30

SYNS: 7-CYANOBENZ(c)ACRIDINE □ 7-CYANOBENZO(c)ACRIDINE

CONSENSUS REPORTS: Cyanide and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also NITRILES. When heated to decomposition it emits toxic fumes of NO_x and CN⁻.

BAX250 CAS: 3301-75-5 HR: 2
BENZ(c)ACRIDINE-7-CARBOXALDEHYDE

mf: C₁₈H₁₁NO mw: 257.30

SYNS: 3,4-BENZACRIDINE-9-ALDEHYDE □ 7-FORMYLBENZ(c)ACRIDINE □ 7-FORMYLBENZO(c)ACRIDINE

TOXICITY DATA with REFERENCE:

mma-sat 10 µg/plate CRNGDP 7,23,86
SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x. See also ALDEHYDES.

BAY250 CAS: 63019-50-1 HR: 2
α-(BENZ(c)ACRIDIN-7-YL)-N-(p-(DIMETHYLAMINO)PHENYL)NITRONE

mf: C₂₆H₂₁N₃O mw: 391.50

SYN: α-(9-(3,4-BENZACRIDYL))-N-(p-DIMETHYLAMINO-PHENYL)-NITRONE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x.

BAY275 CAS: 1896-62-4 HR: 3
trans-BENZALACETONE

mf: C₁₀H₁₀O mw: 146.20

PROP: A liquid.

SYNS: trans-BENZYLIDENACETONE □ trans-BENZYLIDENE-ACETONE □ 3-BUTEN-2-ONE, 4-PHENYL-, (E)- □ METHYL trans-STYRYL KETONE □ trans-4-PHENYL-3-BUTENE-2-ONE □ TPBO

TOXICITY DATA with REFERENCE:

mma-sat 300 µg/plate FCTOD7 20,427,82

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Mutation data reported. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.

BAY300 CAS: 98-87-3 HR: 3
BENZAL CHLORIDE

DOT: UN 1886

mf: $C_7H_6Cl_2$ mw: 161.03

PROP: Very refractive liquid. Mp: -16° , bp: 214° , d: 1.29.

SYNS: BENZYL DICHLORIDE □ BENZYLENE CHLORIDE □ BENZYLIDENE CHLORIDE □ BENZYLIDENE CHLORIDE (DOT) □ CHLOROBENZAL □ CHLORURE de BENZYLIDENE □ (DICHLOROMETHYL)BENZENE □ α - α -DICHLOROTOLUENE □ RCRA WASTE NUMBER U017 □ TOLUENE, α - α -DICHLORO-

TOXICITY DATA with REFERENCE:

mma-sat 600 nmol/plate/20M MUREAV 54,143,78

mma-esc 600 nmol/plate/20M MUREAV 54,143,78

mrc-bcs 31 μ mol/disc MUREAV 54,143,78

orl-rat LD50:3249 mg/kg NTIS** PB214-270

ihl-rat LD50:61 ppm/2H IARC** 29,65,82

orl-mus LD50:2462 mg/kg AMRL** TR-72-62/72

ihl-mus LD50:32 ppm/2H IARC** 29,65,82

CONSENSUS REPORTS: IARC Cancer Review: Human Inadequate Evidence IMEMDT 29,65,82; Animal Limited Evidence IMEMDT 29,65,82. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program. EPA Extremely Hazardous Substances List. Community Right-To-Know List.

DFG MAK: Confirmed Human Carcinogen

DOT CLASSIFICATION: 6.1; Label: Poison

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic and neoplastigenic data. Poison by inhalation. Moderately toxic by ingestion. A strong irritant and lachrymator. Causes central nervous system depression. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl₂. See also CHLORINATED HYDROCARBONS, AROMATIC.

BAY500 CAS: 100-52-7 HR: 3
BENZALDEHYDE

mf: C_7H_6O mw: 106.13

PROP: Colorless liquid; burning taste with bitter almond odor. Mp: -26° , bp: 179° , fp: -56.9° (to -55°), flash p: $148^\circ F$, d: 1.041, autoign temp: $377^\circ F$, vap press: 1 mm @ 26.2° , vap d: 3.65, refr index: 1.544. Sltly sol in water; misc in alc, ether, oils.

SYNS: ALMOND ARTIFICIAL ESSENTIAL OIL □ ARTIFICIAL ALMOND OIL □ BENZENECARBALDEHYDE □ BENZENE-CARBONAL □ BENZOIC ALDEHYDE □ FEMA No. 2127 □ NCI-C56133

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MOD FCTXAV 14,659,76

sce-hmn:lym 1 mmol/L MUREAV 206,17,88

slt-mus:lym 400 mg/L EMMUEG 17,196,91

orl-rat LD50:1300 mg/kg FCTXAV 2,327,64

scu-rat LDLo:5000 mg/kg AIPTAK 27,163,22

orl-mus LD50:28 mg/kg EJTXAZ 9,99,76

ipr-mus LD50:9 mg/kg EJTXAZ 9,99,76

scu-rbt LD50:5000 mg/kg FCTXAV 14,693,76

orl-gpg LD50:1000 mg/kg FCTXAV 2,327,64

CONSENSUS REPORTS: NTP Carcinogenesis Studies (gavage); Some Evidence mouse; NTP-TR-378,90; No Evidence: rat NTP-TR-378,90. EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. Moderately toxic by subcutaneous route. An allergen. Acts as a feeble local anesthetic. Local contact may cause contact dermatitis. Causes central nervous system depression in small doses and convulsions in larger doses. A skin irritant. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. Combustible liquid. To fight fire, use water (may be used as a blanket), alcohol, foam, dry chemical. A strong reducing agent. Reacts violently with peroxyformic acid and other oxidizers. See also ALDEHYDES.

BAY750 CAS: 633-03-4 HR: 3
BENZALDEHYDE GREEN

mf: $C_{27}H_{33}N_2 \cdot HO_4S$ mw: 482.69

PROP: Bright green crystals or powder. Mp: 210° (decomp). Sol in H_2O , EtOH, and $CHCl_3$.

SYNS: ADC BRILLIANT GREEN CRYSTALS □ AIZEN DIAMOND GREEN GH □ ANILINE GREEN □ ASTRA DIAMOND GREEN GX □ AVON GREEN A-4379 □ BASIC BRIGHT GREEN □ BRILLIANT GREEN SULFATE □ CALCOZINE BRILLIANT GREEN G □ C.I. 42040 □ C.I. BASIC GREEN 1, SULFATE (1:1) □ DEORLENE GREEN JJO □ DIAMOND GREEN G □ EMERALD GREEN □ ETHYL GREEN □ FAST GREEN JJO □ HIDACO BRILLIANT GREEN □ MALACHITE GREEN G □ MITSUI BRILLIANT GREEN G □ TERTROPHENE BRILLIANT GREEN G □ TOKYO ANILINE BRILLIANT GREEN

TOXICITY DATA with REFERENCE:

skn-hmn 2 mg/2D-I MLD ADVEA4 52,55,72

skn-gpg 6 mg/3D-I ADVEA4 52,55,72

mno-smc 100 μ g/L VINIT* #542-84

orl-rat LDLo:10 mg/kg GTPZAB 7(2),54,63

ipr-rat LDLo:8 mg/kg PSEBAA 31,825,34

ipr-mus LDLo:5 mg/kg PSEBAA 31,825,34

ivn-mus LDLo:3 mg/kg PSEBAA 31,825,34

ipr-gpg LDLo:3 mg/kg PSEBAA 31,825,34

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, intraperitoneal, and intravenous routes. A mild human skin irritant. Mutation data reported. See also ALDEHYDES and SULFATES. When heated to decomposition it emits very toxic fumes of NO_x , NH_3 , and SO_x .

BAZ000 CAS: 1627-73-2 HR: 3
BENZALDEHYDE THIOSEMICARBAZONE

mf: $C_8H_9N_3S$ mw: 179.26

TOXICITY DATA with REFERENCE:

orl-rat LDLo:500 mg/kg NCNSA6 5,44,53

orl-mus LD50:100 mg/kg JPPMAB 2,764,50

SAFETY PROFILE: Poison by ingestion. See also ALDEHYDES. When heated to decomposition it emits very toxic fumes of NO_x and SO_x .

BBA000 CAS: 1708-39-0 HR: 2
BENZAL GLYCERYL ACETAL

mf: C₁₀H₁₂O₃ mw: 180.22**PROP:** Colorless to pale-yellow liquid; mild almond odor. D: 1.183–1.193, refr index: 1.535–1.541, flash p: 165°F.**SYNS:** BENZALDEHYDE GLYCERYL ACETAL (FCC) □ BENZYLIDENE GLYCEROL □ BUTYL PHENYL ACETATE □ FEMA No. 2209 □ 2-PHENYL-m-DIOXAN-5-OL**TOXICITY DATA with REFERENCE:**

orl-rat LD50:3150 mg/kg FCTXAV 14,699,76

ipr-mus LD50:1296 mg/kg AIPTAK 85,474,51

skn-rbt LD50:5000 mg/kg FCTXAV 14,699,76

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. Mildly toxic by skin contact. Combustible liquid. When heated to decomposition it emits acrid smoke and irritating fumes.**BBA500 HR: 3
BENZALKONIUM CHLORIDE****PROP:** White or yellowish-white powder, aromatic odor, very bitter taste.**SYNS:** ALKYL DIMETHYLETHYL BENZYL AMMONIUM CHLORIDE □ ALKYL((ETHYLPHENYL)METHYL)DIMETHYL QUATERNARY AMMONIUM CHLORIDES □ BENIROL □ BTC 471 □ CEQUARTYL □ DRAPOLEX □ ENUCLEN □ GERMINOL □ GERMITOL □ OCTYL-OCTADECYL DIMETHYL ETHYL-BENZYL AMMONIUM CHLORIDES □ PARALKAN □ ROCCAL □ RODALON □ ZEPHIRAN CHLORIDE □ ZEPHIROL**TOXICITY DATA with REFERENCE:**

eye-rat 2 mg FCTXAV 15,131,77

eye-mus 2 mg SEV FCTXAV 15,131,77

eye-dog 2 mg FCTXAV 15,131,77

eye-rbt mg SEV FCTXAV 15,131,77

eye-rbt 8 µg SEV AJOPAA 78,98,74

eye-rbt 10 mg MLD TXAPA9 55,501,80

eye-gpg 2 mg FCTXAV 15,131,77

eye-ham 2 mg SEV FCTXAV 15,131,77

orl-rat LD50:300 mg/kg 28ZEAL 4,38,69

skn-rat LD50:1420 mg/kg PCJOAU 12,1593,78

orl-mus LD50:150 mg/kg PCJOAU 12,1593,78

SAFETY PROFILE: Poison by ingestion. Moderately toxic by skin contact. A severe eye irritant. A bactericide and fungicide. Dangerous; when heated to decomposition it emits toxic fumes of Cl⁻ and NO_x. See also CHLORIDES.**BBA625 CAS: 39387-42-3 HR: 3
BENZALKONIUM SACCHARINATE****SYNS:** AKYL DIMETHYL BENZYL AMMONIUM SACCHARINATE □ ALKYL DIMETHYL BENZALKONIUM SACCHARINATE □ HOLLICHEM HQ 3300 □ ONYXIDE 3300**TOXICITY DATA with REFERENCE:**

orl-rat LD50:990 mg/kg KSRNAM 4,219,70

ipr-rat LD50:37 mg/kg KSRNAM 4,219,70

scu-rat LD50:720 mg/kg KSRNAM 4,219,70

ivn-rat LD50:14,500 µg/kg KSRNAM 4,219,70

orl-mus LD50:920 mg/kg KSRNAM 4,219,70

ipr-mus LD50:33 mg/kg KSRNAM 4,219,70

scu-mus LD50:790 mg/kg KSRNAM 4,219,70

ivn-mus LD50:23 mg/kg KSRNAM 4,219,70

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion andsubcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.**BBA750 HR: 3
BENZALMALONONITRILE**mf: C₆H₅CH₂CH(CN)₂ mw: 156.2**CONSENSUS REPORTS:** Cyanide and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Poison. See also NITRILES and CYANIDE.**BBA800 CAS: 5341-44-6 HR: 3
BENZAL-m-NITROANILINE**mf: C₁₃H₁₀N₂O₂ mw: 226.25**SYNS:** ANILINE, N-BENZYLIDENE-m-NITRO- □ BENZEN AMINE, 3-NITRO-N-(PHENYLMETHYLENE)-(9CI) □ N-BENZYLIDENE-m-NITROANILINE**TOXICITY DATA with REFERENCE:**

ipr-mus LDLo:250 mg/kg CBCCT* 6,52,1954

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x.**BBB000 CAS: 55-21-0 HR: 2
BENZAMIDE**mf: C₇H₇NO mw: 121.15**PROP:** Plates from H₂O. Mp: 130°. Bp: 288° (slty decomp). Slty sol in H₂O, Et₂O; sol in EtOH.**SYNS:** BENZOIC ACID AMIDE □ BENZOYLAMIDE □ PHENYL CARBOXYAMIDE**TOXICITY DATA with REFERENCE:**

sce-hmn:lym 1 mmol/L MUREAV 122,223,83

sce-ham:ovr 1 mmol/L MUREAV 123,63,84

mnt-mam:kdy 1 g/L IJEBAA 18,329,80

cyt-mam:kdy 1 g/L IJEBAA 18,329,80

ipr-rat LD50:781 mg/kg APFRAD 48,23,90

orl-mus LD50:1160 mg/kg TXAPA9 19,20,71

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Community Right-To-Know List. Human mutation data reported.**SAFETY PROFILE:** Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x. See also AMIDES.**BBB250 CAS: 1499-54-3 HR: D
(2-BENZAMIDO)ACETOHYDROXAMIC ACID**mf: C₉H₁₀N₂O₃ mw: 194.21**SYNS:** BENZOYLAMINOACETOHYDROXAMIC ACID □ HIPPUROHYDROXAMIC ACID**TOXICITY DATA with REFERENCE:**

dnr-bcs 10 µmol/disc JOPHDQ 3,557,80

mma-sat 5 µmol/plate MUREAV 56,7,77

mmo-sat 1 mg/plate AMACCQ 11,753,77

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.**BBB500 CAS: 63018-69-9 HR: 2
BENZ(a)ANTHRACEN-7-ACETONITRILE**mf: C₂₀H₁₃N mw: 267.34**SYN:** 10-CYANOMETHYL-1,2-BENZANTHRACENE

CONSENSUS REPORTS: Cyanide and its compounds are on the Community Right-To-Know List.
SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also NITRILES. When heated to decomposition it emits toxic fumes of NO_x and CN^- .

BBB750 CAS: 2381-18-2 HR: 2
BENZ(a)ANTHRACEN-7-AMINE

mf: $\text{C}_{18}\text{H}_{13}\text{N}$ mw: 243.32

PROP: Yellow leaflets or needles. Mp: 174.5–175.5°.

SYN: 10-AMINO-1,2-BENZANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x . See also AROMATIC AMINES.

BBC000 CAS: 56961-60-5 HR: 2
BENZ(a)ANTHRACEN-8-AMINE

mf: $\text{C}_{18}\text{H}_{13}\text{N}$ mw: 243.32

SYN: 5-AMINO-1,2-BENZANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x . See also AROMATIC AMINES.

BBC250 CAS: 56-55-3 HR: 3
BENZ(a)ANTHRACENE

mf: $\text{C}_{18}\text{H}_{12}$ mw: 228.30

PROP: Colorless leaflets or plates from EtOH/AcOH. Mp: 160°, bp: 400°.

SYNS: BA □ BENZANTHRACENE □ 1,2-BENZANTHRACENE

□ 1,2-BENZ(a)ANTHRACENE □ 1,2-BENZANTHRAZEN

(GERMAN) □ BENZANTHRENE □ 1,2-BENZANTHRENE □

BENZO ANTHRACENE □ BENZO(a)ANTHRACENE □ 1,2-

BENZO ANTHRACENE □ BENZO(a)PHENANTHRENE □

BENZO(b) PHENANTHRENE □ 2,3-BENZOPHENANTHRENE

□ 2,3-BENZPHENANTHRENE □ NAPHTHANTRACENE □

RCRA WASTE NUMBER U018 □ TETRAPHENE

TOXICITY DATA with REFERENCE:

mma-sat 4 µg/plate CRNGDP 5,747,84

msc-hmn:lym 9 µmol/L DTESD7 10,277,82

dni-hmn:oth 10 µmol/L CNREA8 42,367,82

dnd-mus-skn 192 µmol/kg CRNGDP 5,231,84

ivn-mus LDLo:10 mg/kg JNCIAM 1,225,40

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 2A IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 32,135,83; IMEMDT 3,45,73. EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

ACGIH TLV: Suspected Human Carcinogen

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data by skin contact and other routes. Poison by intravenous route. Human mutation data reported. It is found in oils, waxes, smoke, food, drugs. When heated to decomposition it emits acrid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Polynuclear Aromatic Hydrocarbons (HPLC), 5506; (GC), 5515.

BBC500 CAS: 63018-40-6 HR: 2
1,2-BENZANTHRACENE-10-ACETIC ACID, METHYL ESTER

mf: $\text{C}_{21}\text{H}_{16}\text{O}_2$ mw: 300.37

SYN: BENZ(a)ANTHRACEN-7-ACETIC ACID, METHYL ESTER

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and fumes. See also ESTERS.

BBC750 CAS: 7505-62-6 HR: 1
BENZ(a)ANTHRACENE-7-CARBOXALDEHYDE

mf: $\text{C}_{19}\text{H}_{12}\text{O}$ mw: 256.31

SYN: 1,2-BENZANTHRACENE-10-ALDEHYDE

TOXICITY DATA with REFERENCE:

mmo-sat 1 nmol/plate DCTODJ 2,383,79

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and fumes. See also ALDEHYDES.

BBD000 CAS: 19926-22-8 HR: 2
BENZ(a)ANTHRACENE-7,12-DICARBOX-ALDEHYDE

mf: $\text{C}_{20}\text{H}_{12}\text{O}_2$ mw: 284.32

SYN: 7,12-DIFORMYLBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

dnd-omi 2 mg/L PNASA6 74,1378,77

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes. See also ALDEHYDES.

BBD250 CAS: 60967-88-6 HR: 2
BENZ(a)ANTHRACENE-1,2-DIHYDRODIOL

mf: $\text{C}_{18}\text{H}_{14}\text{O}_2$ mw: 262.32

SYNS: BA-1,2-DIHYDRODIOL □ trans-1,2-DIHYDROXY-1,2-DIHYDROBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

mma-sat 10 µmol/L CNREA8 42,1620,82

msc-ham:lng 1200 µg/L/3H BJCAAI 39,540,79

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BBD500 CAS: 60967-89-7 HR: 2
BENZ(a)ANTHRACENE-3,4-DIHYDRODIOL

mf: $\text{C}_{18}\text{H}_{14}\text{O}_2$ mw: 262.32

SYNS: BA-3,4-DIHYDRODIOL □ trans-3,4-DIHYDRO-3,4-

DIHYDROXYBENZO(a)ANTHRACENE □ trans-3,4-DIHYDROXY-3,4-DIHYDROBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

mma-sat 25 µmol/L BBRA9 72,680,76

msc-ham:lng 2500 µg/L/3H BJCAAI 39,540,79

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data by skin contact. Mutation

data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BBD750 CAS: 67335-43-7 HR: 2
(+)-(3S,4S)trans-BENZ(a)ANTHRACENE-3,4-DIHYDRODIOL

mf: C₁₈H₁₀O₃ mw: 274.28

SYNS: (+)-(3S,4S)-trans-3,4-DIHYDRO-3,4-DIHYDROXYBENZ(a)-ANTHRACENE □ (+)-(3S,4S)-trans-3,4-DIHYDRO-3,4-DIHYDROXYBENZO(a)ANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. When heated to decomposition it emits acrid smoke and irritating fumes.

BBD980 CAS: 3719-37-7 HR: 2
BENZ(a)ANTHRACENE-5,6-DIHYDRODIOL

mf: C₁₈H₁₄O₂ mw: 262.32

SYNS: BA-5,6-DIHYDRODIOL □ BA-5,6-trans-DIHYDRODIOL □ BENZ(a)ANTHRACENE-5,6-trans-DIHYDRODIOL □ trans-5,6-DIHYDROXY-5,6-DIHYDROBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

otr-ham:emb 4 mg/L CNREA8 32,1391,72

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic and neoplastigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BBE000 CAS: 32373-17-4 HR: D
BENZ(a)ANTHRACENE-5,6-cis-DIHYDRODIOL

mf: C₁₆H₁₄O₂ mw: 238.30

SYNS: BA-5,6-cis-DIHYDRODIOL □ cis-5,6-DIHYDRO-5,6-DIHYDROXYBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

otr-ham:emb 2500 µg/L CNREA8 32,1391,72

dns-ham:emb 5 mg/L CBINA8 5,69,72

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BBE750 CAS: 34501-24-1 HR: 2
trans-BENZ(a)ANTHRACENE-8,9-DIHYDRODIOL

mf: C₁₈H₁₄O₂ mw: 262.32

SYNS: BA-8,9-DIHYDRODIOL □ trans-8,9-DIHYDROXY-8,9-DIHYDROBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

mma-sat 25 µmol/L BBRC9 72,680,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic and neoplastigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BBF000 CAS: 60967-90-0 HR: 2
BENZ(a)ANTHRACENE-10,11-DIHYDRODIOL

mf: C₁₈H₁₄O₂ mw: 262.32

SYNS: BA-10,11-DIHYDRODIOL □ trans-10,11-DIHYDROXY-10,11-DIHYDROBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

mma-sat 100 µmol/L CNREA8 42,1620,82

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. When heated to decomposition it emits acrid smoke and irritating fumes.

BBF500 CAS: 2564-65-0 HR: 2
BENZ(a)ANTHRACENE-7,12-DIMETHANOL

mf: C₂₀H₁₆O₂ mw: 288.36

SYNS: 9:10-BISHYDROXYMETHYL-1:2-BENZANTHRACENE □ 7:12-DIHYDROXYMETHYLBENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

mma-sat 20 nmol/plate 46OJAN -,675,81

mimo-esc 1 g/L/2H GENTAE 39,141,54

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BBF750 CAS: 63018-62-2 HR: 2
BENZ(a)ANTHRACENE-7,12-DIMETHANOLDIACETATE

mf: C₂₄H₂₀O₄ mw: 372.44

SYNS: ACETIC ACID, BENZ(a)ANTHRACENE-7,12-

DIMETHANOL DIESTER □ 9,10-BISACETOXYMETHYL-1,2-BENZANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BBG000 CAS: 67335-42-6 HR: 2
(-)(3R,4R)-trans-BENZ(a)ANTHRACENE-3,4-DIOL

mf: C₁₈H₁₀O₃ mw: 274.28

SYNS: (-)(3R,4R)-trans-3,4-DIHYDRO-3,4-DIHYDROXY

BENZ(a)ANTHRACENE □ (-)(3R,4R)trans-3,4-DIHYDRO-3,4-DIHYDROXYBENZO(a)ANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data by skin contact. When heated to decomposition it emits acrid smoke and irritating fumes.

BBG200 CAS: 56614-97-2 HR: D
BENZ(a)ANTHRACENE-3,9-DIOL

mf: C₁₈H₁₂O₂ mw: 260.30

PROP: Yellow solid. Mp: 265–270° (decomp).

□ 3,9-DIHYDROXYBENZ(a)ANTHRACENE

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating fumes.

BBG500 CAS: 63020-45-1 HR: 2

BENZ(a)ANTHRACENE-7-ETHANOLmf: C₂₀H₁₆O mw: 272.36

SYN: 10-β-HYDROXYETHYL-1,2-BENZANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.**BBG750 CAS: 17012-91-8 HR: 2****BENZ(a)ANTHRACENE-7-METHANEDIOLDIACETATE (ester)**mf: C₂₃H₁₈O₄ mw: 358.41

SYN: 7-DIACETOXYMETHYLBENZ(a)ANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. See also ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.**BBH000 CAS: 63018-59-7 HR: 2****BENZ(a)ANTHRACENE-7-METHANETHIOL**mf: C₁₉H₁₄S mw: 274.39

SYN: 1,2-BENZANTHRYL-10-METHYLMERCAPTAN

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of SO_x. See also MERCAPTANS.**BBH250 CAS: 16110-13-7 HR: 2****BENZ(a)ANTHRACENE-7-METHANOL**mf: C₁₉H₁₄O mw: 258.33

SYNS: 7-HMBA □ 7-HYDROXYMETHYLBENZ(a)ANTHRACENE □ 10-HYDROXY-METHYL-1,2-BENZANTHRACENE

TOXICITY DATA with REFERENCE:

dnd-omi 30 μmol/L CBINA8 31,51,80

otr-mus:oth 100 μg/L IJCNAW 13,304,74

dnd-mus:emb 800 μg/L CNREA8 33,2386,73

dnd-mam:lym 30 μmol/L CBINA8 31,51,80

CONSENSUS REPORTS: EPA Genetic Toxicology Program.**SAFETY PROFILE:** Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.**BBH500 CAS: 17526-24-8 HR: 2****BENZ(a)ANTHRACENE-7-METHANOL ACETATE**mf: C₂₁H₁₆O₂ mw: 300.37

SYNS: ACETIC ACID, BENZ(a)ANTHRACENE-7-METHANOL ESTER □ 10-ACETOXYMETHYL-1,2-BENZANTHRACENE

TOXICITY DATA with REFERENCE:

mmo-sat 1 nmol/plate DCTODJ 2,383,79

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. See also ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.**BBH750 CAS: 63018-57-5 HR: 2****BENZ(a)ANTHRACENE-7-THIOL**mf: C₁₈H₁₂S mw: 260.36

SYNS: 1,2-BENZANTHRYL-10-MERCAPTAN □ 7-MERCAPTOBENZ(a)ANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of SO_x. See also MERCAPTANS.**BBI000 CAS: 960-92-9 HR: 2****BENZ(a)ANTHRACEN-5-OL**mf: C₁₈H₁₂O mw: 244.30**PROP:** Golden crystals from toluene. Mp: 202–204° (decomp).

SYNS: 3-HYDROXY-1,2-BENZANTHRACENE □ 5-HYDROXY-BENZ(a)ANTHRACENE

TOXICITY DATA with REFERENCE:

dnd-ham:kdy 5 mg/L BCPCA6 20,1297,71

dnd-ham:lng 1 mg/L CBINA8 4,389,71/72

CONSENSUS REPORTS: EPA Genetic Toxicology Program.**SAFETY PROFILE:** Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.**BBI250 CAS: 82-05-3 HR: 3****7H-BENZ(de)ANTHRACEN-7-ONE**mf: C₁₇H₁₀O mw: 230.27**PROP:** Pale yellow needles from xylene or EtOH. Mp: 174°, vap press: 1 mm @ 225.0°.

SYNS: 7H-BENZ(de)ANTHRACENE-7-ONE □ BENZANTHRENONE □ BENZANTHRONE □ 7H-BENZO(de)ANTHRACEN-7-ONE □ BENZOANTHRONE □ MS-BENZANTHRONE □ NAPHTHANTHRONE □ 7-OXOBENZ(de)ANTHRACENE

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,60,72

eye-rbt 100 mg/24H MOD 28ZPAK -,60,72

ipr-rat LD50:1500 mg/kg RPTOAN 40,137,77

ipr-mus LD50:290 mg/kg RPTOAN 40,137,77

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal route. Skin and eye irritant. Combustible when heated. Incompatible with nitrobenzene and potassium hydroxide. When heated to decomposition it emits acrid smoke and irritating fumes.**BBI750 CAS: 63018-49-5 HR: 2****1,2-BENZANTHRYL-3-CARBAMIDOACETIC ACID**mf: C₂₁H₁₆N₂O₃ mw: 344.39

SYN: N-(BENZ(a)ANTHRACEN-5-YLCARBAMOYL)GLYCINE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.**BBJ000 CAS: 63018-50-8 HR: 2****1,2-BENZANTHRYL-10-CARBAMIDOACETIC ACID**mf: C₂₁H₁₆N₂O₃ mw: 344.39

SYN: N-(BENZ(a)ANTHRACEN-7-YLCARBAMOYL)GLYCINE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x.

BBJ250 CAS: 63018-56-4 HR: 2
1,2-BENZANTHRYL-10-ISOCYANATE

mf: C₁₉H₁₁NO mw: 269.31

SYN: ISOCYANIC ACID, BENZ(a)ANTHRACEN-7-YL ESTER

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also ESTERS. When heated to decomposition it emits toxic fumes of NO_x.

BBJ500 CAS: 1477-19-6 HR: 3
BENZARONE

mf: C₁₇H₁₄O₃ mw: 266.31

PROP: Solid. Mp: 126–127°.

SYNS: BENZOFURAN, (2-ETHYL-3-(4'-HYDROXYBENZOYL))
 □ 2-ETHYL-3-BENZOFURANYL p-HYDROXYPHENYL KETONE
 □ 2-ETHYL-3-(p-HYDROXYBENZOYL)BENZOFURAN □ 2-ETHYL-4'-HYDROXY-3-BENZOYLBENZOFURAN □ ETHYL-2(HYDROXY-4 BENZOYL)-3 BENZOFURANNE □ FRAGIVIX

TOXICITY DATA with REFERENCE:

ipr-mus LD50:200 mg/kg AIPTAK 154,94,65

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Poison by intraperitoneal route. An experimental teratogen. Other experimental reproductive effects. A flammable liquid. When heated to decomposition it emits acrid and irritating smoke and fumes. See also KETONES.

BBJ750 CAS: 59-97-2 HR: 3
BENZAZOLINE HYDROCHLORIDE

mf: C₁₀H₁₂N₂•ClH mw: 196.70

PROP: Solid. Mp: 171–172°.

SYNS: ARTERODY □ BENZYLIMIDAZOLINE HYDROCHLORIDE □ 2-BENZYL-2-IMIDAZOLINE MONOHYDROCHLORIDE □ IMIDALINE HYDROCHLORIDE □ PRISCOL □ PRISCOLINE HYDROCHLORIDE □ TOLAVAD □ TOLAZOLINE CHLORIDE □ TOLAZOLINE HYDROCHLORIDE □ TOLPAL

TOXICITY DATA with REFERENCE:

ivn-inf TDLo:48 mg/kg/47H-C:GIT AUPJB7 22,221,86
 ivn-hmn TDLo:150 µg/kg:CVS,SKN FOMDAK 27,729,41
 orl-rat LD50:1200 mg/kg NIIRDN 6,511,82
 ipr-rat LD50:100 mg/kg NIIRDN 6,511,82
 ivn-rat LD50:85 mg/kg NIIRDN 6,511,82
 orl-mus LD50:400 mg/kg ARZNAD 21,1992,71
 ipr-mus LD50:130 mg/kg ARZNAD 21,1992,71
 ivn-mus LD50:60 mg/kg CLDND*

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, intravenous, and intraperitoneal routes. Human systemic effects by intravenous route: change in heart rate, sweating, ulceration or bleeding from duodenum, ulceration or bleeding from small intestine, unspecified vascular effects. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BBK000 CAS: 300-62-9 HR: 3
BENZEDRINE

mf: C₉H₁₃N mw: 135.23

PROP: Liquid or oil. Bp: 203°, flash p: <212°F (OC), d: 0.931, vap d: 4.65. Sltly sol in H₂O.

SYNS: ACTEDRON □ ADIPAN □ ALLODENE □ dl-AMPHETAMINE □ ANOREXIDE □ (±)-BENZEDRINE □ dl-BENZEDRINE □ DEOXYNOREPHEDRINE □ (±)-DESOXYNOREPHEDRINE □ racemic-DESOXYNOREPHEDRINE □ ELASTONON □ ISOAMYCIN □ ISOMYN □ MECODRIN □ α-METHYLBENZENEETHANEAMINE □ dl-α-METHYLPHENETHYLAMINE □ (±)-α-METHYLPHENETHYLAMINE □ NOREPHEDRANE □ NOVDYDRINE □ ORTEDRINE □ PHENEDRINE □ dl-1-PHENYL-2-AMINOPROPANE □ PROFAMINA □ PROPISAMINE □ PSYCHEDRINE □ RAPHETAMINE □ SIMPATEDRIN □ SYMPAMINE □ SYMPATEDRINE □ WECKAMINE

TOXICITY DATA with REFERENCE:

dnd-esc 40 µmol/L MUREAV 89,95,81
 unr-man LDLo:2206 µg/kg 85DCAI 2,73,70
 orl-rat LD50:30 mg/kg ARZNAD 23,810,73
 scu-rat LD50:180 mg/kg JPETAB 85,119,45
 orl-mus LD50:21 mg/kg ARZNAD 23,810,73
 ipr-mus LD50:5500 µg/kg AIPTAK 161,206,66
 scu-mus LD50:15 mg/kg FEPA7 4,139,45
 ivn-mus LD50:15 mg/kg AIPTAK 145,392,63

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. EPA Extremely Hazardous Substances List.

SAFETY PROFILE: A deadly human poison by an unspecified route. An experimental poison by ingestion, subcutaneous, intraperitoneal, and intravenous routes. Experimental reproductive effects. Mutation data reported. A central nervous system stimulant. Overdoses cause hyperactivity, restlessness, insomnia, rapid pulse, rise in blood pressure, dilated pupils, dryness of the throat. Combustible when exposed to heat, flame, or oxidizers. When heated to decomposition it emits toxic fumes of NO_x. To fight fire, use CO₂, dry chemical, alcohol foam, water mist, fog. See other benzedrine entries.

BBK250 CAS: 156-31-0 HR: 3
BENZEDRINE SULFATE

mf: C₁₈H₂₆N₂•H₂O₄S mw: 368.54

SYNS: AMITRENE □ AMPHOIDS S □ AMPHORDS S □ BAR-TIME □ DIAMPHETAMINE SULFATE □ KLINE □ dl-α-METHYLPHENETHYLAMINE SULFATE □ PHENETHYLAMINE, α-METHYL-, SULFATE (2:1) □ 1-PHENYL-2-AMINOPROPANE SULFATE

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:25 mg/kg JPETAB 100,267,50
 scu-rat LDLo:10 mg/kg JPETAB 71,62,41
 ipr-mus LD50:75 mg/kg JPETAB 93,114,48
 scu-mus LD50:14 mg/kg JPETAB 87,214,46
 orl-dog LDLo:20 mg/kg
 AJMSA9 198,785,39

SAFETY PROFILE: A poison via ingestion, intraperitoneal, and subcutaneous routes. When heated to decomposition it emits very toxic fumes of SO_x and NO_x. See also BENZEDRINE and SULFATES.

BBK500 CAS: 51-63-8 HR: 3
d-BENZEDRINE SULFATE

mf: $C_{18}H_{26}N_2 \cdot H_2O_4S$ mw: 368.54

PROP: Plates.

SYNS: ACEDRON □ ADJUETS □ ADRIXINE □ AFATIN □ ALBEMAP □ AMDEX □ d-AMFETASUL □ AMITRENE □ AMPHAETEX □ AMPHEDRINE □ AMPHEREX □ (+)-AMPHETAMINE SULFATE □ d-AMPHETAMINE SULFATE □ AMSUSTAIN □ APETAIN □ ARDEX □ BETAFEDRINA □ BETAFEDRINE □ d-BETAPHEDRINE □ CARRTIME □ CRADEX □ DADEX □ DADOX d-CITRAMINE □ DELLIPSOIDS □ DEPHADREN □ DESOXYN □ DEXAIME □ DEXALINE □ DEXALME □ DEXAMED □ DEXAMINE □ DEXAMPHAMINE □ DEXAMPHETAMINE □ DEXAMPHETAMINE SULFATE □ DEXAMYL □ DEXEDRINA □ DEXEDRINE SULFATE □ DEXIES □ DEXTROAMPHETAMINE SULFATE □ DEXTRO- α -METHYLPHENETHYLAMINE SULFATE □ DEXTRO-1-PHENYL-2-AMINOPROPANE SULFATE □ DEXTRO- β -PHENYLISOPROPYLAMINE SULFATE □ FASTBALLS □ HEARTS □ (S)- α -METHYL-BENZENEETHANAMINE SULFATE (2:1) □ d- α -METHYLPHENETHYLAMINE SULFATE □ ORANGES □ PELLCAFS □ PELLCAP □ PELLCAPS □ PERKE □ PHENOPROMIN □ d-1-PHENYL-2-AMINOPROPANE SULFATE □ d- β -PHENYLISOPROPYLAMINE SULFATE □ PHETADEX □ PSYCHODRINE □ REVIDEX □ SIMPAMINA-D □ SYMPAMINA-D □ TEMPODEX □ TUPHETAMINE □ TYDEX □ ZAMINE

TOXICITY DATA with REFERENCE:

orl-rat LD50:32 mg/kg ARZNAD 33,141,83
ipr-rat LD50:43,200 μ g/kg TXAPA9 29,397,74
ivn-rat LD50:30 mg/kg JPETAB 110,180,54
orl-mus LD50:10 mg/kg JMCAR 18,71,75
ipr-mus LD50:9700 μ g/kg JPETAB 135,240,62
scu-mus LD50:16 mg/kg AIPAK 184,34,70
ivn-mus LD50:30 mg/kg JPETAB 137,365,62
orl-dog LD50:10 mg/kg PSEBAA 118,557,65
ivn-dog LD50:3 mg/kg PSEBAA 118,557,65
ivn-rbt LD50:10 mg/kg JPETAB 110,180,54
orl-bwd LD50:56,200 μ g/kg AECTCV 12M355,83

SAFETY PROFILE: Poison by ingestion, intraperitoneal, subcutaneous, and intravenous routes. A human teratogen that causes developmental abnormalities of the central nervous system. Experimental reproductive effects including other teratogenic effects. A habit-forming stimulant. When heated to decomposition it emits very toxic fumes of SO_x and NO_x . See also other benzidine compounds and SULFATES.

BBK750 CAS: 51-62-7 HR: 3
I-BENZEDRINE SULFATE

mf: $C_{18}H_{26}N_2 \cdot H_2O_4S$ mw: 368.54

PROP: Odorless, white powder. Mp: $>300^\circ$. Sol in water.

SYNS: (-)-AMPHETAMINE SULFATE □ I-AMPHETAMINE SULFATE □ LEVEDRINE □ I-1-PHENYL-2-AMINOPROPANE SULFATE

TOXICITY DATA with REFERENCE:

scu-rat LDLo:160 mg/kg JPETAB 71,62,41
ipr-mus LD50:232 mg/kg JPETAB 158,135,67

SAFETY PROFILE: A poison via subcutaneous and intraperitoneal routes. See also SULFATES. When heated to decomposition it emits very toxic fumes of SO_x and NO_x .

BBK800 CAS: 59464-43-6 HR: D
(BENZENAMINE) CHLORO((1,2,5,6-ETA)-1,5-

CYCLOOCTADIENE)RHODIUM

mf: $C_{14}H_{19}ClNRh$ mw: 339.70

PROP: IDLH 100 mg/ m^3 (as Rh).

SYN: RHODIUM, (BENZENAMINE) CHLORO((1,2,5,6-ETA)-1,5-CYCLOOCTADIENE)-

TOXICITY DATA with REFERENCE:

mic-sat 25 μ Lg/plate TECSY 8,81,1984

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x , Rh, and Cl^- .

BBL000 CAS: 142-04-1 HR: 3
BENZENAMINE HYDROCHLORIDE

DOT: UN 1548

mf: $C_6H_7N \cdot ClH$ mw: 129.60

PROP: Crystals. Vap d: 4.46, d: 1.22, mp: 198° , bp: 245° , flash p: $380^\circ F$ (OC).

SYNS: ANILINE CHLORIDE □ ANILINE HYDROCHLORIDE (DOT) □ "ANILINE SALT" □ ANILINIUM CHLORIDE □ CHLORHYDRATE d'ANILINE (FRENCH) □ CHLORID ANILINU (CZECH) □ NCI-C03736 □ PHENYLAMINE HYDROCHLORIDE □ SUL ANILINOVA (CZECH) □ USAF EK-442

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MOD 28ZPAK -,65,72
eye-rbt 20 mg/24H MOD 28ZPAK -,65,72
sce-hmn:lym 50 μ mol/L BLFSBY 29b,561,84
otr-rat:emb 79,500 ng/plate JJATDK 1,190,81
sce-ham:fbr 10 μ mol/L JNCIAM 58,1635,77
orl-rat LD50:840 mg/kg TXAPA9 42,417,77
ipr-rat LDLo:500 mg/kg NCNSA6 5,11,53
orl-mus LD50:841 mg/kg NTIS** PB214-270
ipr-mus LD50:300 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: IARC Cancer Review:

Animal Limited Evidence IMEMDT 27,39,82. NCI Carcinogenesis Bioassay Completed; Results Positive: rat NCITR* NCI-CG-TR-130,78; Results Negative: mouse NCITR* NCI-CG-TR-130,78. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

DOT CLASSIFICATION: 6.1; Label: KEEP AWAY FROM FOOD

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic and tumorigenic data. Poison by intraperitoneal route. Moderately toxic by ingestion. Experimental teratogenic effects. Human mutation data reported. A skin and eye irritant. Combustible when exposed to heat or flame. When heated to decomposition or on contact with acid or acid fumes, it emits highly toxic fumes of aniline and chlorine compounds. Reacts explosively with aniline at $240^\circ C/7.6$ bar. Can react vigorously with oxidizing materials. To fight fire, use water, CO_2 , water mist or spray, dry chemical. See also ANILINE.

BBL100 CAS: 3101-79-9 HR: 3
BENZENAMINE, compounded with 1,3,5-TRINITROBENZENE (1:1)

mf: $C_6H_7N \cdot C_6H_3N_3O_6$ mw: 306.26

SYNS: ANILINE COMPLEX WITH TRINITROBENZENE □ TRINITROBENZENE-ANILINE COMPLEX

TOXICITY DATA with REFERENCE:

orl-rat LD50:375 mg/kg JAFCAU 3,936,1955
orl-mus LDLo:1070 mg/kg AECTCV 14,111,1985

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x.

**BBL250
BENZENE**

CAS: 71-43-2

HR: 3

DOT: UN 1114

mf: C₆H₆ mw: 78.12

PROP: Clear, colorless liquid. Mp: 5.51°, bp: 80.093–80.094°, flash p: 12°F (CC), d: 0.8794 @ 20°, autoign temp: 1044°F, lel: 1.4%, uel: 8.0%, vap press: 100 mm @ 26.1°, vap d: 2.77, ULC: 95–100. Very sltly sol in H₂O; misc in most org solvs. IDLH 500 ppm.

SYNS: (6)ANNULENE □ BENZEEN (DUTCH) □ BENZEN (POLISH) □ BENZIN (OBS.) □ BENZINE (OBS.) □ BENZOL (DOT) □ BENZOLE □ BENZOLENE □ BENZOLO (ITALIAN) □ BICARBURET of HYDROGEN □ CARBON OIL □ COAL NAPHTHA □ CYCLOHEXATRIENE □ FENZEN (CZECH) □ MINERAL NAPHTHA □ MOTOR BENZOL □ NCI-C55276 □ NITRATION BENZENE □ PHENE □ PHENYL HYDRIDE □ PYROBENZOL □ PYROBENZOLE □ RCRA WASTE NUMBER U019

TOXICITY DATA with REFERENCE:

skn-rbt 15 mg/24H open MLD AIHAAP 23,95,62
skn-rbt 20 mg/24H MOD 85JCAE -,25,86
eye-rbt 88 mg MOD AMIHAB 14,387,56
eye-rbt 2 mg/24H SEV 28ZPAK -,23,72
oms-hmn:lym 5 µmol/L CNREA8 45,2471,85
mma-mus:emb 2500 mg/L PMRSDJ 5,639,85
ihl-man TCLo:200 mg/m³/78W-I:CAR,BLD EJCAAH 7,83,71
ihl-hmn TCLo:10 ppm/8H/10Y-I:CAR,BLD TRBMAV 37,153,78
ihl-hmn TC:150 ppm/15M/8Y-I:CAR,BLD BLOOAW 52,285,78
ihl-man TC:600 mg/m³/4Y-I:CAR,BLD NEJMAG 271,872,64
ihl-man TC:150 ppm/11Y-I:CAR,BLD BLUTA9 28,293,74
ihl-hmn TC:8 ppb/4W-I:CAR,BLD NEJMAG 316,1044,87
ihl-hmn TC:10 mg/m³/11Y-I:CAR,BLD BJIMAG 44,124,87
ihl-hmn LCLo:2 pph/5M TABIA2 3,231,33
orl-man LDLo:50 mg/kg YAKUD5 22,883,80
ihl-hmn LCLo:20,000 ppm/5M 29ZUA8 -,53
ihl-man TCLo:150 ppm/1Y-I:BLD BLUTA9 28,293,74
ihl-hmn TCLo:100 ppm INMEAF 17,199,48
ihl-hmn LCLo:65 mg/m³/5Y:BLD ARGEAR 44,145,74
orl-rat LD50:3306 mg/kg TXAPA9 19,699,71
ihl-rat LC50:10,000 ppm/7H 28ZRAQ -,113,60
ipr-rat LD50:2890 µg/kg 36YFAG -,302,77
orl-mus LD50:4700 mg/kg HYSAAV 32,349,67
ihl-mus LC50:9980 ppm JIHTAB 25,366,43
ipr-mus LD50:340 mg/kg ANYAA9 243,104,75
orl-dog LDLo:2000 mg/kg HBAMAX 4,1313,35
ihl-dog LCLo:146,000 mg/m³ HBTXAC 1,324,56
ihl-cat LCLo:170,000 mg/m³ HBTXAC 1,324,56
ivn-rbt LDLo:88 mg/kg JTEHD6 -(Suppl 2),45,77

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 7,120,87; Human Limited Evidence IMEMDT 7,203,74; Animal Inadequate Evidence IMEMDT 7,203,74; IARC Cancer Review: Animal Limited Evidence IMEMDT 29,93,82; Human Sufficient Evidence IMEMDT 29,93,82.

NTP Carcinogenesis Studies (gavage); Clear Evidence: mouse, rat NTPTR* NTP-TR-289,86. EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory. On Community Right-To-Know List.

OSHA PEL: TWA 1 ppm; STEL 5 ppm; Pk 5 ppm/15M/8H; Cancer Hazard

ACGIH TLV: TWA 0.5 ppm; STEL 2.5 ppm (skin); Confirmed Human Carcinogen; BEI: 25 µg creatinine of Sphenylmercapturic acid in urine at end of shift

DFG MAK: DFG TRK: Human Carcinogen

NIOSH REL: TWA 0.32 mg/m³; CL 3.2 mg/m³/15M

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Confirmed human carcinogen producing myeloid leukemia, Hodgkin's disease, and lymphomas by inhalation. Experimental carcinogenic, neoplastigenic, and tumorigenic data. A human poison by inhalation. An experimental poison by skin contact, intraperitoneal, intravenous, and possibly other routes. Moderately toxic by ingestion and subcutaneous routes. A severe eye and moderate skin irritant. Human systemic effects by inhalation and ingestion: blood changes, increased body temperature. Experimental teratogenic and reproductive effects. Human mutation data reported. A narcotic. In industry, inhalation is the primary route of chronic benzene poisoning. Poisoning by skin contact has been reported. Recent (1987) research indicates that effects are seen at less than 1 ppm. Exposures needed to be reduced to 0.1 ppm before no toxic effects were observed. Elimination is chiefly through the lungs. A common air contaminant.

A dangerous fire hazard when exposed to heat or flame. Explodes on contact with diborane, bromine pentafluoride, permanganic acid, peroxomonosulfuric acid, and peroxodisulfuric acid. Forms sensitive, explosive mixtures with iodine pentafluoride, silver perchlorate, nitryl perchlorate, nitric acid, liquid oxygen, ozone, and arsenic pentafluoride + potassium methoxide (explodes above 30°C). Ignites on contact with sodium peroxide + water, dioxygenyl tetrafluoroborate, iodine heptafluoride, and dioxygen difluoride. Vigorous or incandescent reaction with hydrogen + Raney nickel (above 210°C), uranium hexafluoride, and bromine trifluoride. Can react vigorously with oxidizing materials, such as Cl₂, CrO₃, O₂, NClO₄, O₃, perchlorates, (AlCl₃ + FClO₄), (H₂SO₄ + permanganates), K₂O₂, (AgClO₄ + acetic acid), Na₂O₂. Moderate explosion hazard when exposed to heat or flame. Use with adequate ventilation. To fight fire, use foam, CO₂, dry chemical.

Poisoning occurs most commonly via inhalation of the vapor, although benzene can penetrate the skin and cause poisoning. Locally, benzene has a comparatively strong irritating effect, producing erythema and burning, and, in more severe cases, edema and even blistering. Exposure to high concentrations of the vapor (3000 ppm or higher) may result from failure of equipment or spillage. Such exposure, while rare in industry, may cause acute poisoning, characterized by the narcotic action of benzene on the central nervous system. The anesthetic action of benzene is similar to that of other anesthetic gases, consisting of a preliminary stage of excitation followed by depression and, if exposure is continued, death through respiratory failure. The chronic, rather than the acute,

form of benzene poisoning is important in industry. It is a recognized leukemogen. There is no specific blood picture occurring in cases of chronic benzol poisoning. The bone marrow may be hypoplastic, normal, or hyperplastic, the changes reflected in the peripheral blood. Anemia, leucopenia, macrocytosis, reticulocytosis, thrombocytopenia, high color index, and prolonged bleeding time may be present. Cases of myeloid leukemia have been reported. For the worker, repeated blood examinations are necessary, including hemoglobin determinations, white and red cell counts, and differential smears. Where a worker shows a progressive drop in either red or white cells, or where the white count remains below <5000/mm³ or the red count remains below 4.0 million/mm³, on two successive monthly examinations, the worker should be immediately removed from benzene exposure. Elimination is chiefly through the lungs, when fresh air is breathed. The portion that is absorbed is oxidized, and the oxidation products are combined with sulfuric and glycuronic acids and eliminated in the urine. This may be used as a diagnostic sign. Benzene has a definite cumulative action, and exposure to a relatively high concentration is not serious from the point of view of causing damage to the blood-forming system, provided the exposure is not repeated. In acute poisoning, the worker becomes confused and dizzy, complains of tightening of the leg muscles and of pressure over the forehead, then passes into a stage of excitement. If allowed to remain exposed, he quickly becomes stupefied and lapses into coma. In nonfatal cases, recovery is usually complete with no permanent disability. In chronic poisoning the onset is slow, with the symptoms vague; fatigue, headache, dizziness, nausea and loss of appetite, loss of weight, and weakness are common complaints in early cases. Later, pallor, nosebleeds, bleeding gums, menorrhagia, petechiae, and purpura may develop. There is great individual variation in the signs and symptoms of chronic benzene poisoning.

ANALYTICAL METHOD: For occupational chemical analysis use OSHA: #12 or NIOSH: Hydrocarbons, Aromatic, 1501; Hydrocarbons, BP 36-126 C, 1500.

BBL500 CAS: 122-78-1 HR: 2
BENZENEACETALDEHYDE

mf: C₈H₈O mw: 120.16

PROP: Oily, colorless liquid that polymerizes and grows more viscous on standing; odor similar to lilac and hyacinth. Has been crystallized, mp: 33–34°, d: (25/25) 1.023–1.030, refr index: 1.525–1.545, bp: (10) 78°, n: (20/D) 1.524–1.528, flash p: 154°F. Sltly sol in water; sol in alc, ether, and propylene glycol. One part is sol in two parts of 80% alc forming a clear solution.

SYNS: FEMA No. 2874 □ HYACINTHIN □ PAA □ PHENYL-ACETALDEHYDE (FCC) □ PHENYLACETIC ALDEHYDE □ PHENYLETHANAL □ α-TOLUALDEHYDE □ α-TOLUIC ALDEHYDE

TOXICITY DATA with REFERENCE:

skn-hmn 2%/48H FCTXAV 17,377,79
 orl-rat LD50:1550 mg/kg FCTXAV 17,377,79
 orl-mus LD50:3890 mg/kg FCTXAV 17,377,79
 orl-gpg LD50:3890 mg/kg FCTXAV 17,377,79

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. Human skin irritant. Combustible liquid. When heated to decomposition it emits acrid smoke and irritating fumes. See also ALDEHYDES.

BBL750 CAS: 98-05-5 HR: 3
BENZENEARSONIC ACID

mf: C₆H₇AsO₃ mw: 202.05

PROP: Colorless crystals from water. D: 1.760, mp: 160° decomp. Sol in water.

SYNS: PHENYL ARSENIC ACID □ PHENYLARSONIC ACID

TOXICITY DATA with REFERENCE:

orl-rat LDLo:50 mg/kg JPETAB 93,287,48
 orl-mus LD50:270 µg/kg CLDND* 80,93,44
 ivn-rbt LD50:16 mg/kg JPETAB 80,93,44

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. EPA Extremely Hazardous Substances List. Arsenic and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 mg/(As)m³

ACGIH TLV: BEI: 35 µ (As)/L inorganic arsenic and methylated metabolites in urine

SAFETY PROFILE: A deadly poison by ingestion and intravenous routes. See also ARSENIC COMPOUNDS. When heated to decomposition it emits toxic fumes of As.

BBL825 CAS: 4547-69-7 HR: 3
BENZENE-1,3-BIS(SULFONYL AZIDE)

mf: C₆H₄N₆O₄S₂ mw: 288.26

C₆H₄(SO₂N₃)₂

SAFETY PROFILE: An explosive. Upon decomposition it emits toxic fumes of SO_x and NO_x. See also EXPLOSIVES and AZIDES.

BBM000 CAS: 98-80-6 HR: 3
BENZENEBORONIC ACID

mf: C₆H₇BO₂ mw: 121.94

PROP: Needles from H₂O. Mp: 216°. Sol in MeOH, EtOH; sltly sol in H₂O and Et₂O.

SYNS: ACIDE PHENYLBORIQUE (FRENCH) □ BORO-PHENYLIC ACID □ PHENYLBORIC ACID □ USAF BO-2

TOXICITY DATA with REFERENCE:

orl-rat LD50:740 mg/kg 14KTAK -,693,64
 ipr-mus LD50:500 mg/kg NTIS** AD277-689
 ivn-mus LD50:320 mg/kg CSLNX* NX#02033
 ivn-dog LDLo:450 mg/kg BANMAC 135,314,51
 orl-rbt LDLo:600 mg/kg 14KTAK -,693,64
 skn-rbt LDLo:4500 mg/kg 14KTAK -,693,64
 ipr-gpg LD50:284 mg/kg BANMAC 135,314,51

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion. Mildly toxic by skin contact. See also BORON COMPOUNDS. When heated to decomposition it emits acrid smoke and irritating fumes.

BBM100 CAS: 68855-24-3 HR: 1
BENZENE, C₁₄₋₃₀-ALKYL DERIVATIVES

SYNS: C₁₄₋₃₀ ALKYLAROMATIC DERIVATIVES □ THERMINOL 55

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MOD EPASR* 8EHQ-0890-0969
eye-rbt 100 mg/24H MLD EPASR* 8EHQ-0890-0969
orl-rat LD50:>15,800 mg/kg EPASR* 8EHQ-0890-0969
skn-rbt LD50:>7940 mg/kg EPASR* 8EHQ-0890-0969

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low toxicity by ingestion and skin contact. A skin and eye irritant. When heated to decomposition it emits acrid smoke and irritating vapors.

**BBM250 CAS: 2227-79-4 HR: 3
BENZENECARBOTHIOAMIDE**

mf: C₇H₇NS mw: 137.21

PROP: Mp: 116–118°.

SYNS: BENZOTHIAMIDE □ BENZOTHIOAMIDE □ THIOBENZAMIDE □ TIOBENZAMIDE (ITALIAN)

TOXICITY DATA with REFERENCE:

mnt-mus-orl 180 µmol/kg MUREAV 192,141,87
orl-mus LD50:95 mg/kg THERAP 8,237,53
ipr-mus LD50:500 mg/kg PCJOAU 11,1383,77

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion. Moderately toxic by intraperitoneal route. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.

**BBM500 CAS: 63021-32-9 HR: 2
BENZENECARBOXALDEHYDE**

mf: C₁₉H₁₅N mw: 257.35

PROP: Colorless to yellow liquid with bitter almond odor. Mp: -26°, bp: 179°, d: 1.044. Sol in water.

SYNS: BENZALDEHYDE FFC □ 7-ETHYLBENZ(c)ACRIDINE □ 9-ETHYL-3,4-BENZACRIDINE □ PHENYLMETHANAL

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also ALDEHYDES. When heated to decomposition it emits toxic fumes of NO_x.

**BBM750 CAS: 1670-14-0 HR: 2
BENZENECARBOXIMIDAMIDE HYDRO
CHLORIDE**

mf: C₇H₈N₂•ClH mw: 156.63

PROP: Mp: 77–87°. Sltly sol in water.

SYN: BENZAMIDINE, HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:580 mg/kg BIREBV 20,1045,79

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x, HCl, and Cl⁻.

**BBN000 HR: 3
n-BENZENE-n-CYCLOPENTADIENYL IRON(II)
PERCHLORATE**

mf: C₁₁H₁₁ClFeO₄ mw: 298.51

SAFETY PROFILE: A shock-sensitive explosive. The dry material detonates on touching with spatula. Upon decomposition it emits toxic fumes of Cl⁻. See also PERCHLORATES.

**BBN100 CAS: 4175-38-6 HR: D
1,4-BENZENEDIAMINE, N,N'-DICYCLOHEXYL-**

mf: C₁₈H₂₈N₂ mw: 272.48

SYNS: N,N'-DICYCLOHEXYL-p-PHENYLENEDIAMINE □ p-PHENYLENEDIAMINE, N,N'-DICYCLOHEXYL- □ UOP 26

TOXICITY DATA with REFERENCE:

mno-sat 50 µg/plate PCBRD2 141,407,84

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.

**BBN250 CAS: 17333-86-7 HR: 3
BENZENE DIAZONIUM-2-CARBOXYLATE**

mf: C₇H₄N₂O₂ mw: 148.12

SAFETY PROFILE: A heat- and shock-sensitive explosive. Explosive or violent reaction with aniline, arylisocyanides, and 1-pyrrolidinylcyclohexene. When heated to decomposition it emits toxic fumes of NO_x. See also EXPLOSIVES.

**BBN500 CAS: 100-34-5 HR: 3
BENZENE DIAZONIUM CHLORIDE**

mf: C₆H₅ClN₂ mw: 140.58

PROP: Crystals.

SYN: BENZENE DIAZONIUM CHLORIDE (dry) (DOT)

DOT CLASSIFICATION: Forbidden

SAFETY PROFILE: Potentially explosive when dry. Potentially explosive reaction with potassium o-methyldithiocarbonate. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x.

**BBN650 CAS: 36211-73-1 HR: 3
BENZENEDIAZONIUM HYDROGEN SULFATE**

mf: C₆H₆N₂O₄S mw: 202.18

PROP: Prisms.

SAFETY PROFILE: Explodes at 100°C. When heated to decomposition it emits toxic fumes of SO_x and NO_x.

**BBN750 CAS: 619-97-6 HR: 3
BENZENE DIAZONIUM NITRATE**

mf: C₆H₅N₃O₃ mw: 167.12

SYN: BENZENE DIAZONIUM NITRATE (dry) (DOT)

DOT CLASSIFICATION: Forbidden

SAFETY PROFILE: An explosive sensitive to friction, impact and heating to 90°. Upon decomposition it emits toxic fumes of NO_x. See also EXPLOSIVES and NITRATES.

**BBN850 CAS: 6925-01-5 HR: 3
BENZENEDIAZONIUM-4-OXIDE**

mf: C₆H₄N₂O mw: 120.11

SAFETY PROFILE: Decomposes violently at 75°C. When heated to decomposition it emits toxic fumes of NO_x.

BBO000**HR: 3****BENZENE DIAZONIUM SALTS****SAFETY PROFILE:** Spontaneously explosive.Incompatible with ammonium sulfide, hydrogen sulfide, and disodium sulfide. Upon decomposition it emits toxic fumes of NO_x.**BBO125****CAS: 612-31-7****HR: 3****BENZENEDIAZONIUM-2-SULFONATE**mf: C₆H₄N₂O₃S mw: 184.17**PROP:** Crystals. Mp: 106° (decomp).**SAFETY PROFILE:** Explodes on contact with flame or on impact. Upon decomposition it emits toxic fumes of SO_x and NO_x.**BBO250****CAS: 305-80-6****HR: 3****BENZENEDIAZONIUM-4-SULFONATE**mf: C₆H₄N₂O₃S mw: 184.17**PROP:** Needles from water. Sol in water.**SAFETY PROFILE:** An unstable explosive which may explode when touched. Incompatible with metals. Store in small quantities under refrigeration in loosely plugged containers. Upon decomposition it emits toxic fumes of NO_x and SO_x.**BBO325****CAS: 369-57-3****HR: 3****BENZENEDIAZONIUM TETRAFLUOROBORATE**mf: C₆H₅N₂•BF₄ mw: 191.94**SYNS:** BENZENEDIAZONIUM FLUOROBORATE □ BENZENE DIAZONIUM FLUOROBORATE □ PHENYLDIAZONIUM FLUOROBORATE (SALT) □ PHENYLDIAZONIUM TETRAFLUOROBORATE**TOXICITY DATA with REFERENCE:**

mmo-sat 10 µmol/L CNREA8 42,1446,82

orl-ham LD50:354 mg/kg CALEDQ 15,289,82

scu-ham LD50:166 mg/kg CALEDQ 15,289,82

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x and F⁻. See also BORON COMPOUNDS.**BBO400****CAS: 19521-84-7****HR: 3****BENZENEDIAZONIUM TRIBROMIDE**mf: C₆H₅Br₃N₂ mw: 344.83**SAFETY PROFILE:** A sensitive explosive. Upon decomposition it emits toxic fumes of Br⁻ and NO_x. See also EXPLOSIVES.**BBO500****CAS: 88-96-0****HR: 1****1,2-BENZENEDICARBOXAMIDE**mf: C₈H₈N₂O₂ mw: 164.18**SYNS:** NCI-C03612 □ P-D □ PHTHALAMIDE □ o-PHTHALIC ACID DIAMIDE**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:4004 mg/kg APFRAD 48,23,90

ipr-mus LD50:4104 mg/kg APFRAD 48,23,90

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. NTP Carcinogenesis Bioassay (feed): No Evidence: mouse, rat NCITR* NCI-TR-161,79.**SAFETY PROFILE:** Mildly toxic by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x.**BBO600****CAS: 31122-82-4****HR: 1****1,3-BENZENEDICARBOXAMIDE, 5-(ACETYL(2-HYDROXYETHYL)AMINO)-N,N'-BIS(2,3-DIHYDROXYPROPYL)-N,N'-DIMETHYL-2,4,6-TRIIODO-**mf: C₂₀H₂₈I₃N₃O₈ mw: 819.21**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:19,365 mg/kg APSXAS 20,219,83

SAFETY PROFILE: Low toxicity by intravenous route. When heated to decomposition it emits toxic vapors of NO_x and I⁻.**BBO625****CAS: 65701-07-7****HR: 2****1,2-BENZENEDICARBOXYLIC ACID, 4,4'-CARBONYLBIS-, AR,AR'-DIETYL ESTERCOMP. WITH 1,3-BENZENEDIAMINE**mf: C₂₁H₁₈O₉•C₆H₈N₂ mw: 522.55**SYNS:** SKYBOND 700 □ SKYBOND 700 POLYIMIDE RESIN □ SKYBOND 2595**TOXICITY DATA with REFERENCE:**

skn-rbt 500 µL/4H SEV NTIS** OTS0546074

eye-rbt 100 µL/24H SEV NTIS** OTS0546074

orl-rat LD50:3945 mg/kg NTIS** OTS0524326-1

skn-rbt LDLo:>5 g/kg NTIS** OTS0546074

SAFETY PROFILE: Moderately toxic by ingestion. A severe skin and eye irritant. Experimental reproductive effects. When heated to decomposition it emits toxic vapors of NO_x.**BBO635****CAS: 68515-41-3****HR: D****1,2-BENZENEDICARBOXYLIC ACID, DI-C₇-C₉-BRANCHED ALKYL ESTERS****SYN:** BISOFLEX L79P**SAFETY PROFILE:** Experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating vapors.**BBO700****CAS: 52284-35-2****HR: 3****1,3-BENZENEDICARBOXYLIC ACID, DIISODECYL ESTER**mf: C₂₈H₄₆O₄ mw: 446.74**SYNS:** DIISODECYLISOPHTHALATE □ ISOPHTHALIC ACID, DIISODECYL ESTER (6CI)**TOXICITY DATA with REFERENCE:**

orl-rat LD50:>64 mL/kg AIHAAP 23,95,62

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.**BBO725****CAS: 84777-06-0****HR: D****1,2-BENZENEDICARBOXYLIC ACID DIPENTYL ESTER, BRANCHED AND LINEAR****SYN:** DIISOPENTYLPHTHALATE**SAFETY PROFILE:** Experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating vapors. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BBO750 CAS: 25035-37-4 HR: 2
1,4-BENZENEDICARBOXYLIC ACID, POLYMER
with 1,4-BENZENEDIAMINE

mf: $(C_8H_6O_4 \cdot C_6H_8N_2)_x$

SYNS: KEVLAR 29, MONOMER-BASED □ KEVLAR 49, MONOMER-BASED □ KEVLAR 149, MONOMER-BASED □ KEVLAR 49, SRU □ POLY(p-PHENYLENE TEREPHTHALAMIDE) □ TEREPHTHALIC ACID, POLYAMIDE with p-PHENYLENEDIAMINE (8CI)

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 68,409,1997; Animal Inadequate Evidence IMEMDT 68,409,1997; Human Inadequate Evidence IMEMDT 68,409,1997.

SAFETY PROFILE: Questionable carcinogen. When heated to decomposition it emits acrid smoke and irritating vapors.

BBP000 CAS: 123-61-5 HR: 3
BENZENE-1,3-DIISOCYANATE

mf: $C_8H_4N_2O_2$ mw: 160.14

PROP: Crystals. Mp: 51–55°, bp: 102–104° @ 8 mm.

SYNS: BENZENE-1,3-DIISOCYANATE □ BENZENE, 1,3-DIISOCYANATO- □ 1,3-DIISOCYANATOBENZENE □ NACCONATE 400 □ m-PHENYLENE DIISOCYANATE □ m-PHENYLENE ISOCYANATE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:5600 µg/kg CSLNX* NX#07804

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Cyanide and its compounds are on the Community Right-To-Know List.

NIOSH REL: TWA (Diisocyanates) 0.005 ppm; CL 0.02 ppm/10M

SAFETY PROFILE: A sensitizer at very low concentrations. Deadly poison by intravenous route. When heated to decomposition it emits toxic fumes of NO_x and CN^- . See also ESTERS.

BBP250 CAS: 623-26-7 HR: 2
p-BENZENEDINITRILE

mf: $C_8H_4N_2$ mw: 128.14

PROP: Crystals. Mp: 222°, vap d: 4.42.

SYNS: 4-CYANOBENZONITRILE □ p-DICYANOBENZENE □ 1,4-DICYANOBENZENE □ NITRIL KYSELINY TEREFTALOVE (CZECH) □ p-PDN □ p-PHTHALODINITRILE □ TEREFT-ALODINITRIL (CZECH) □ TEREPHTHALONITRILE

TOXICITY DATA with REFERENCE:

eye-rbt 500 mg/24H MLD 28ZPAK -,159,72

orl-rat LD50:>6400 mg/kg ZAARAM 19,225,69

ipr-rat LD50:4004 mg/kg APFRAD 48,23,90

orl-mus LD50:>300 mg/kg JMCAR 21,906,78

ipr-mus LD50:699 mg/kg INHEAO 4,11,66

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Cyanide and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. An eye irritant. When heated to decomposition it emits toxic fumes of CN^- and NO_x . See also NITRILES.

BBO750 CAS: 608-73-1 HR: 3
BENZENE HEXACHLORIDE

mf: $C_6H_6Cl_6$ mw: 290.82



PROP: Technical grade contains 68.7% α-BHC, 6.5% β-BHC, and 13.5% γ-BHC (JPFC2 14,305,79). White, crystalline powder. Mp: 113°, vap press: 0.0317 mm @ 20°.

SYNS: BHC (USDA) □ COMPOUND-666 □ DBH □ ENT 8,601 □ GAMMEXANE □ HCCH □ HEXA □ HEXACHLOR □ HEXA CHLORAN □ HEXACHLOROCYCLOHEXANE □ 1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE □ HEXYLAN □ JACUTIN □ LATKA 666

TOXICITY DATA with REFERENCE:

mno-omi 100 mg/L MILEDM 5,103,77

otr-rat-orl 875 mg/kg/7W-I CRNGDP 5,479,84

ihl-man TCLo:400 µg/kg/3D:CNS,GIT,MET GISAAA 49(10),26,84

orl-rat LD50:100 mg/kg ATXKA8 22,115,66

skn-rat LD50:0.9 mg/kg 85DPAN -,71/76

orl-mus LD50:59 mg/kg PEMNDP 8,443,87

scu-rbt LD50:75 mg/kg XPHPAW 414,273,55

orl-gpg LDLo:1400 mg/kg MEMOAQ 4,25,50

orl-ckn LD50:597 mg/kg POSCAL 60,2599,81

orl-brd LD50:56 mg/kg TXAPA9 21,315,72

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Animal Sufficient Evidence IMEMDT 5,47,74.

ACGIH TLV: TWA 0.5 mg/m³ (skin)

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data by ingestion and skin contact. Poison by ingestion, skin contact, and subcutaneous routes. Human systemic effects by inhalation: headache, nausea or vomiting, and fever. Implicated in aplastic anemia. Experimental reproductive effects. Mutation data reported. Lindane is more toxic than DDT or dieldrin. Potentially violent reaction with dimethyl-formamide + iron. When heated to decomposition it emits highly toxic fumes of phosgene, HCl, and Cl₂. See other benzenehexachloride entries.

A toxic organochlorine that is persistent in the environment and accumulates in mammalian tissue. For cattle, the oral LD50 ≤ 100 mg/kg. The various isomers have different actions; the γ (lindane) and α isomers are central nervous system stimulants, the principal symptom being convulsions. The β and δ isomers are central nervous system depressants. The use of thermal vaporizers with lindane has caused acute poisoning by inhalation.

The dangerous acute dose of the technical mixture has been estimated at about 30 g and the dangerous dose of lindane at about 7 to 15 g. However, as already mentioned, a single dose of 45 mg (or approximately 0.65 mg/kg) of lindane caused convulsions. Lindane shows a marked difference in toxicity to different species. Its toxic effect on laboratory animals compares favorably with that of DDT, but for several domestic animals, notably calves, lindane is more toxic than DDT or dieldrin. On a chronic systemic basis the α, β and γ isomers are experimental carcinogens. Has been implicated in aplastic anemia.

Dermatitis and perhaps other manifestations based on sensitivity represent a sort of chronic, though probably

not systemic intoxication, which has been observed in humans.

The signs and symptoms of confirmed acute poisoning in humans have paralleled those in experimental animals. These signs and symptoms are: excitation, hyperirritability, loss of equilibrium, clonic-tonic convulsions, and later depression.

There is some evidence that the pulmonary edema and vascular collapse may be of neurogenic origin also. The symptoms in animals systemically poisoned by the γ -isomer alone are essentially similar to those caused by mixtures, although the onset may be earlier. Workers acutely exposed to high air concentrations of lindane and its decomposition products show headache, nausea, and irritation of eyes, nose, and throat.

In rare instances, urticaria has followed exposure to lindane vapor. Unlike the signs and symptoms already mentioned, this allergic manifestation occurs only in susceptible individuals, and usually only after a period of sensitization.

BBQ000 CAS: 319-84-6 HR: 3
BENZENE HEXACHLORIDE- α -isomer

mf: $C_6H_6Cl_6$ mw: 290.82

PROP: Solid. Mp: 158°.

SYNS: α -BENZENEHEXACHLORIDE \square α -BHC \square ENT 9,232 \square α -HCH \square α -HEXACHLORANE \square HEXACHLOROCYCLOHEXAN (GERMAN) \square α -HEXACHLOROCYCLOHEXANE \square α -1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE (MAK) \square 1- α ,2- α ,3- β ,4- α ,5- β ,6- β -HEXACHLOROCYCLOHEXANE \square α -LINDANE

TOXICITY DATA with REFERENCE:

dns-rat:lvrl 1 μ mol/L CNREA8 42,3010,82
 cyt-rat-orl 756 mg/kg/3W JNCIAM 54,1245,75
 orl-hmn LDLo:14 g/kg 85GYAZ -,54,71
 orl-rat LD50:177 mg/kg FATOAO 39,455,76

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Animal Sufficient Evidence IMEMDT 20,195,79; IMEMDT 5,47,74. EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

DFG MAK: 0.5 mg/m³

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, tumorigenic, and neoplastigenic data. Poison by ingestion. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl^- . See also BENZENE HEXACHLORIDE and other benzenehexachloride entries.

BBQ500 CAS: 58-89-9 HR: 3
BENZENE HEXACHLORIDE- γ -isomer

mf: $C_6H_6Cl_6$ mw: 290.82

PROP: Solid. Mp: 112.5°.

SYNS: AALINDAN \square AFICIDE \square AGRISOL G-20 \square AGROCIDE \square AGRONEXIT \square AMEISENATOD \square AMEISEN-MITTEL MERCK \square APARSIN \square APHTIRIA \square APLIDAL \square ARBITEX \square BBH \square BEN-HEX \square BENTOX 10 \square γ -BENZENE HEXACHLORIDE \square BEXOL \square BHC \square γ -BHC \square CELANEX \square CHLORESENE \square CODECHINE \square DBH \square DETMOL-EXTRAKT \square DETOX 25 \square DEVORAN \square DOL GRANULE \square DRILL TOX-SPEZIAL AGLUKON \square ENT 7,796 \square ENTOMOXAN \square EXAGAMA \square FORLIN \square GALLOGAMA \square GAMACID \square GAMAPHEX \square GAMENE \square GAMISO \square GAMMA-COL \square

GAMMAHEXA \square GAMMAHEXANE \square GAMMALIN \square GAMMOPAZ \square HCCH \square HCH \square γ -HCH \square HECLOTOX \square HEXACHLORAN \square γ -HEXACHLORAN \square γ -HEXACHLORANE \square γ -HEXACHLORO BENZENE \square 1- α ,2- α ,3- β ,4- α ,5- α ,6- β -HEXACHLOROCYCLO HEXANE \square γ -HEXACHLOROCYCLOHEXANE (MAK) \square 1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE, γ -ISOMER \square HEXATOX \square HEXICIDE \square HGI \square INEXIT \square ISOTOX \square JACUTIN \square KOKOTINE \square KWELL \square LENDINE \square LENTOX \square LIDENAL \square LINDAGRAIN \square LINDANE (ACGIH, DOT, USDA) \square LINTOX \square MILBOL 49 \square MSZYCOL \square NCI-C00204 \square NEO-SCABICIDOL \square NEXIT \square NOVIGAM \square OVADZIAK \square PEDRACZAK \square QUELLADA \square RCRA WASTE NUMBER U129 \square SANG gamma \square STREUNEX \square TAP 85 \square VITON

TOXICITY DATA with REFERENCE:

dns-ofs:lvrl 45 μ mol/L HKXUDL 4,268,84
 msc-ham:lng 200 mg/L GISAA 49(5),82,84
 orl-chd LDLo:180 mg/kg:CNS,PUL CMEP** -,1,56
 orl-chd TDLo:111 mg/kg:CNS AEHLAU 25,374,72
 skn-man TDLo:20 mg/kg/6W I:EYE,CNS AJDCAI 141,125,87
 orl-rat LD50:76 mg/kg SPEADM 74-1,-,74
 skn-rat LD50:500 mg/kg WRPCA2 9,119,70
 ipr-rat LDLo:35 mg/kg AEPPAE 212,463,51
 orl-mus LD50:44 mg/kg JEENAI 65,632,72
 ipr-mus LD50:125 mg/kg SOGEBZ 2(1),80,66
 orl-dog LD50:40 mg/kg SPEADM 74-1,-,74
 ivn-dog LDLo:8 mg/kg TIEUA7 5,61,50
 orl-rbt LD50:60 mg/kg JHEMA2 22,115,78
 skn-rbt LD50:50 mg/kg AFDOAQ 16,3,52
 ivn-rbt LDLo:4500 μ g/kg JPETAB 92,140,48
 orl-gpg LD50:127 mg/kg FEPRAT 6,386,47
 orl-ham LD50:360 mg/kg JETOAS 7,159,74
 ipr-ham LD50:640 mg/kg ARTODN 58,152,85
 ims-bwd LDLo:26 mg/kg TIEUA7 5,61,50

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Animal Sufficient Evidence IMEMDT 5,47,74; IMEMDT 20,195,79. NCI Carcinogenesis Bioassay (feed); No Evidence: mouse, rat NCITR* NCI-CG-TR-14,77. EPA Extremely Hazardous Substances List. EPA Genetic Toxicology Program. Community Right-To-Know List. Reported in EPA TSCA Inventory. EPA Extremely Hazardous Substances List.

OSHA PEL: TWA 0.5 mg/m³ (skin)

ACGIH TLV: TWA 0.5 mg/m³ (skin)

DFG MAK: 0.1 mg/m³; Not Classifiable as a Human Carcinogen

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic and neoplastigenic data. A human systemic poison by ingestion. Also a poison by ingestion, skin contact, intraperitoneal, intravenous, and intramuscular routes. Human systemic effects by ingestion: convulsions, dyspnea, and cyanosis. Experimental teratogenic and reproductive effects. Mutation data reported. See also BENZENE HEXACHLORIDE and other benzene hexachloride entries. When heated to decomposition it emits toxic fumes of Cl^- , HCl, and phosgene.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Aldrin and Lindane, 5502.

BBQ750

HR: 3

BENZENEHEXACHLORIDE (mixed isomers)mf: C₆H₆Cl₆ mw: 290.82**PROP:** Technical BHC contains about 64% α , 10% β , 13% γ , 9% Δ , and 1% ϵ isomers of 1,2,3,4,5,6-hexachloro-cyclohexane (IARC** 5,47,74).**SYNS:** BENZAHX ☐ BENZEX ☐ DOL ☐ DOLMIX ☐ FBHC ☐ FHCH ☐ 1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE (mixture of isomers) ☐ HEXYCLAN ☐ KOTOL ☐ SOPROCID ☐TECHNICAL BHC ☐ TECHNICAL HCH**TOXICITY DATA with REFERENCE:**unr-man TDLo:643 μ g/kg:CNS CMEP** -,1,56

orl-rat LD50:400 mg/kg 85GMAT -,73,82

orl-mus LD50:500 mg/kg 85GMAT -,73,82

orl-cat LDLo:300 mg/kg 85GMAT -,73,82

ihl-cat LCLo:20 mg/m³/6H 85GMAT -,73,82**CONSENSUS REPORTS:** IARC Cancer Review:

Animal Sufficient Evidence IMEMDT 5,47,74; IMEMDT 20,195,79.

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic and neoplastigenic data. Poison by inhalation and ingestion. Human systemic effects by an unspecified route: convulsions. Potentially dangerous reaction with DMF in presence of Fe, also CCl₄. When heated to decomposition it emits highly toxic fumes of Cl⁻, HCl, and phosgene. See also BENZENE HEXACHLORIDE and other benzenhexachloride entries.**BBR000 CAS: 319-85-7 HR: 3**
***trans*- α -BENZENEHEXACHLORIDE**mf: C₆H₆Cl₆ mw: 290.82**PROP:** Solid. Mp: 297°.**SYNS:** β -BENZENEHEXACHLORIDE ☐ β -BHC ☐ ENT 9,233 ☐ β -HCH ☐ β -HEXACHLOROBENZENE ☐ β -HEXACHLOROCYCLOHEXANE ☐ 1- α ,2- β ,3- α ,4- β ,5- α ,6- β -HEXACHLOROCYCLOHEXANE ☐ β -1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE (MAK) ☐ β -ISOMER ☐ β -LINDANE**TOXICITY DATA with REFERENCE:**

orl-rat LD50:6 g/kg ALLVAR 43-,55

orl-mus LDLo:1500 mg/kg PHTXA6 22,273,59

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Animal Sufficient Evidence IMEMDT 5,47,74; Animal Limited Evidence IMEMDT 20,195,79. Reported in EPA TSCA Inventory.**DFG MAK:** 0.5 mg/m³**SAFETY PROFILE:** Confirmed carcinogen with experimental neoplastigenic data. Mildly toxic by ingestion. When heated to decomposition it emits very toxic fumes of Cl⁻, HCl, and phosgene. See also BENZENE HEXACHLORIDE and other benzenhexachloride entries.**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: aldrin and lindane, 5502.**BBR325 CAS: 6996-92-5 HR: 3**
BENZENESELENIC ACIDmf: C₆H₆O₂Se mw: 189.07**PROP:** Plates from water. Mp: 124–125°.**CONSENSUS REPORTS:** Selenium and its compounds are on the Community Right-To-Know List.**OSHA PEL:** TWA 0.2 mg(Se)/m³**ACGIH TLV:** TWA 0.2 mg(Se)/m³**DFG MAK:** 0.1 mg(Se)/m³**SAFETY PROFILE:** Reacts violently with hydrazine derivatives (e.g., benzohydrazide). When heated to decomposition it emits toxic fumes of Se. See also SELENIUM COMPOUNDS.**BBR380 CAS: 21230-20-6 HR: 3**
BENZENESULFINYL AZIDEmf: C₆H₅N₃OS mw: 167.18**SAFETY PROFILE:** Explodes at room temperature. Upon decomposition it emits toxic fumes of SO_x and NO_x. See also AZIDES.**BBR390 CAS: 4972-29-6 HR: 3**
BENZENE SULFINYL CHLORIDEmf: C₆H₅ClOS mw: 160.56**PROP:** Plates. Mp: 38°.**SAFETY PROFILE:** May explode if stored in a sealed container. When heated to decomposition it emits toxic fumes of SO_x and Cl⁻.**BBR500 CAS: 98-10-2 HR: 2**
BENZENESULFONAMIDEmf: C₆H₇NO₂S mw: 157.20**PROP:** Solid. Mp: 156°.**SYNS:** BENZENESULPHONAMIDE ☐ BENZOSULFONAMIDE ☐ BSA**TOXICITY DATA with REFERENCE:**

orl-rat LD50:991 mg/kg MarJV# 29MAR77

orl-mus LD50:740 mg/kg GTPZAB 23(12),47,79

ipr-mus LD50:1000 mg/kg JMCMA 8,548,65

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.**BBR750 CAS: 1678-25-7 HR: 2**
BENZENESULFONANILIDEmf: C₁₂H₁₁NO₂S mw: 233.30**PROP:** Solid. Mp: 110°.**SYN:** BENZENESULFANILIDE**SAFETY PROFILE:** Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.**BBS250 CAS: 98-11-3 HR: 3**
BENZENESULFONIC ACIDmf: C₆H₆O₃S mw: 158.18**PROP:** Deliquescent plates or tablets. Mp: 43–44°.**SYN:** PHENYLSULFONIC ACID**TOXICITY DATA with REFERENCE:**skn-rbt 100 μ g/24H open AIHAAP 23,95,62

skn-rbt 2 mg/24H SEV 85JCAE -,1053,86

eye-rbt 250 μ g/24H SEV 85JCAE -,1053,86

orl-rat LD50:890 mg/kg AIHAAP 23,95,62

orl-bwd LD50:75 mg/kg TXAPA9 21,315,72

skn-cat LDLo:10 g/kg JPETAB 84,358,45

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, skin contact, and probably inhalation. A severe skin and eye irritant. See also SULFATES and SULFONATES.

BBS275 CAS: 26264-05-1 HR: 2
BENZENESULFONIC ACID, DODECYL-,
COMP. WITH ISOPROPYLAMINE

mf: $C_{18}H_{30}O_3S \cdot C_3H_9N$ mw: 385.67

SYNS: ARYLAN PWS □ ATLAS G 711 □ ATLAS G 3300 □ BENZENESULFONIC ACID, DODECYL-, COMP. WITH 2-PROPANAMINE (1:1) □ BENZENESULFONIC ACID, DODECYL-, ISOPROPYLAMINE SALT □ BENZENESULFONIC ACID, DODECYL-, COMP. WITH ISOPROPYLAMINE (1:1) □ SIPONATE 330 □ DODECYLBENZENESULFONIC ACID COMP. WITH 2-PROPANAMINE (1:1) □ G 711 □ G 3300 □ NANSYS 94 □ P 10-59 □ POLYSTEP A 11 □ RHODACAL 330 □ WITCONATE P 10-59

TOXICITY DATA with REFERENCE:

eye-rbt 100 μ L/24H SEV NTIS** OTS0539894

SAFETY PROFILE: A severe eye irritant. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BBS300 CAS: 80-17-1 HR: 3
BENZENESULFONIC HYDRAZIDE

DOT: UN 2970

mf: $C_6H_8N_2O_2S$ mw: 172.22

SYNS: BENZENESULFOHYDRAZIDE □ BENZENESULFONIC ACID, HYDRAZIDE □ BENZENESULFONOHYDRAZIDE □ BENZENESULFONYL HYDRAZIDE □ BENZENESULFONYL HYDRAZINE □ BENZENE SULPHONOHYDRAZIDE □ CELOGEN BSH □ ChKhZ 9 □ GENITRON BSH □ HYDRAZIDE BSG □ NITROPORE OBSh □ PHENYLSULFOHYDRAZIDE □ PHENYLSULFONYL HYDRAZIDE □ PHENYLSULFONYL HYDRAZINE □ POROFOR BSH □ POROFOR-BSH-PULVER □ POROFOR ChKhZ 9

TOXICITY DATA with REFERENCE:

orl-rat LDLo:50 mg/kg IPSTB3 3,93,76

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 4.1; Label: Flammable Solid

SAFETY PROFILE: Poison by ingestion. A flammable solid. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BBS500 HR: 3
BENZENE SULFONYL AZIDE

mf: $C_6H_5N_3O_2S$ mw: 183.09

SAFETY PROFILE: The crude material explodes violently on heating. The pure material decomposes rapidly but smoothly at 105°. When heated to decomposition it emits toxic fumes of SO_x and NO_x . See also AZIDES.

BBS750 CAS: 98-09-9 HR: 3
BENZENESULFONYL CHLORIDE

DOT: UN 2225

mf: $C_6H_5ClO_2S$ mw: 176.62

PROP: Liquid. D: 1.384 @ 15°/15°, mp: 14.5°, bp: 251–252°.

SYNS: BENZENE SULFONCHLORIDE □ BENZENESULFONIC (ACID) CHLORIDE □ BENZENE SULPHONYL CHLORIDE (DOT) □ BENZENOSULFOCHLOREK (POLISH) □ BENZENOSULPHO CHLORIDE □ BSC-REFINE D □ PHENYL-SULFONYL CHLORIDE □ RCRA WASTE NUMBER U020

TOXICITY DATA with REFERENCE:

orl-rat LD50:1960 mg/kg MEPAAX 20,513,69

ipr-rat LD50:76 mg/kg MEPAAX 20,513,69

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 8; Label: Corrosive

SAFETY PROFILE: Poison by intraperitoneal route. A dangerous storage hazard. It may explode in a sealed bottle. Explosive reaction with dimethyl sulfoxide. Reacts vigorously with methyl formamide. When heated to decomposition it emits toxic fumes of Cl^- and SO_x . See also SULFONATES.

BBT000 CAS: 20611-21-6 HR: 1
2-(BENZENESULFONYL)ETHANOL

mf: $C_8H_{10}O_3S$ mw: 186.24

SYNS: FENYL- β -HYDROXYETHYLSULFON (CZECH) □ 2-(PHENYLSULFONYL)ETHANOL

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,200,72

eye-rbt 20 mg/24H MOD 28ZPAK -,200,72

orl-rat LD50:5830 mg/kg 28ZPAK -,200,72

SAFETY PROFILE: Mildly toxic by ingestion. A skin and eye irritant. When heated to decomposition it emits toxic fumes of SO_x .

BBT250 CAS: 368-43-4 HR: 3
BENZENESULPHONYL FLUORIDE

mf: $C_6H_5FO_2S$ mw: 160.17

PROP: Clear liquid. Bp: 209°, fp: -5°, flash p: 196°F, d: 1.329, vap press: 8 mm @ 80°, vap d: 5.52.

TOXICITY DATA with REFERENCE:

ipr-rat LD50:100 mg/kg NATUAS 173,33,54

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A poison by intraperitoneal route. Slightly irritating to skin. Flammable when exposed to heat or flame. It can react vigorously with oxidizing materials. To fight fire, use water, foam, CO_2 , water spray or mist, dry chemical. When heated to decomposition it emits toxic fumes of F^- and SO_x . See also FLUORIDES and SULFATES.

BBU125 CAS: 3470-17-5 HR: 2
BENZENETRIFUROXAN

mf: $C_6N_6O_6$ mw: 252.12

PROP: Prisms from AcOH (aq) or EtOH/EtOAc. Mp: 194–195° (slight decomp).

SYNS: BENZOTRIFUROXAN □ BENZOTRIS(c)FURAZAN-2-OXIDE □ BTF

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD NTIS** DE83013231

eye-rbt 100 mg/24H SEV NTIS** DE83013231

eye-rbt 100 mg/30S rns SEV NTIS** DE83013231

orl-rat LD50:2884 mg/kg NTIS** DE83013231

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. A mild skin and severe eye irritant. When heated to decomposition it emits acrid smoke and fumes.

BBU250 CAS: 533-73-3 HR: 3

1,2,4-BENZENETRIOL

mf: $C_6H_6O_3$ mw: 126.12

PROP: Plates from Et_2O . Mp: 140.5° (subl). Sol in water.

SYNS: HYDROXYHYDROQUINONE □ HYDROXYQUINOL □ OXYHYDROCHINON (GERMAN) □ OXYHYDROQUINONE □ 1,2,4-TRIHYDROXYBENZENE

TOXICITY DATA with REFERENCE:

oms-hmn:lym 50 µmol/L CNREA8 45,2471,85

sce-hmn:lym 5 µmol/L CNREA8 45,2471,85

scu-mus LD50:120 mg/kg INHEAO 5,143,67

ipr-mus LDLo:125 mg/kg CBCCT* 6,145,54

scu-mus LD50:122 mg/kg INHEAO 5,143,67

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by subcutaneous and intraperitoneal routes. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BBU500 HR: 3

BENZENE TRIOZONIDE

mf: $C_6H_6O_9$ mw: 222.11

SAFETY PROFILE: An unstable explosive, sensitive to the slightest touch. Upon decomposition it emits acrid smoke and fumes.

BBU625 CAS: 3691-78-9 HR: 3

BENZETHIDIN

mf: $C_{23}H_{29}NO_3$ mw: 367.53

PROP: Liquid. Bp: 220° @ 0.5 mm.

SYNS: BENZETHIDINE □ ETHYL-1-(2-BENZYLOXYETHYL)-4-PHENYLPYPERIDINE-4-CARBOXYLATE □ NIH 7574 □ 4-PHENYL-1-(2-(PHENYLMETHXY)ETHYL)-4-PIPERIDINE CARBOXYLIC ACID ETHYL ESTER

TOXICITY DATA with REFERENCE:

orl-rat LD50:284 mg/kg BJPCAL 15,254,60

scu-rat LD50:600 mg/kg BJPCAL 15,254,60

ivn-mus LD50:10,900 µg/kg BJPCAL 15,254,60

SAFETY PROFILE: Poison by ingestion and intravenous routes. Moderately toxic by subcutaneous route. When heated to decomposition it emits toxic fumes of NO_x . See also ESTERS.

BBU750 CAS: 5929-09-9 HR: 3
BENZETHONIUM CHLORIDE MONOHYDRATE

mf: $C_{27}H_{42}NO_2 \cdot Cl \cdot H_2O$ mw: 466.17

SYNS: p-DIISOBUTYLPHENOXYETHOXYETHYLDIMETHYL-BENZYLAMMONIUM CHLORIDE MONOHYDRATE □ HYAMINE 1622 □ PHEMEROL CHLORIDE MONOHYDRATE

TOXICITY DATA with REFERENCE:

orl-rat LD50:420 mg/kg PCOC** -,121,66

ipr-rat LD50:33 mg/kg PCOC** -,121,66

ivn-rat LD50:19 mg/kg PCOC** -,121,66

ivn-mus LD50:32 mg/kg CSLNX* NX#00430

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x .

BBU800 CAS: 5633-14-7 HR: 3

BENZETIMIDE

mf: $C_{23}H_{26}N_2O_2 \cdot ClH$ mw: 398.97

PROP: Solid. Mp: 270–275°.

SYNS: dl-1-BENZYL-4-(2,6-DIOXO-3-PHENYL-3-PIPERIDYL)PIPERIDINE HYDROCHLORIDE □ BZ □

DIOXATRINE □ R 4929 □ SPASMENRAL

TOXICITY DATA with REFERENCE:

ivn-rat LD50:37,600 µg/kg ARZNAD 21,1365,71

orl-mus LD50:680 mg/kg OYYAA2 3,283,69

ivn-mus LD50:46 mg/kg ARZNAD 21,1365,71

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x and HCl. An anticholinergic.

BBU810 HR: D

trans-BENZ(a,e)FLUORANTHENE-3,4-DIHYDRODIOL

mf: $C_{24}H_{16}O_2$ mw: 336.40

SYN: trans-3,4-DIHYDRO-3,4-DIHYDROXYDIBENZO(a,e)-FLUORANTHENE

TOXICITY DATA with REFERENCE:

mma-sat 1200 nmol/L CRNGDP 5,1263,84

dns-mus:emb 1 µmol/L CRNGDP 5,379,84

dnd-man:lym 208 nmol CRNGDP 4,27,83

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and fumes.

BBU825 HR: D

trans-BENZ(a,e)FLUORANTHENE-12,13-DIHYDRODIOL

mf: $C_{24}H_{16}O_2$ mw: 336.40

SYN: trans-12,13-DIHYDRO-12,13-DIHYDROXYDIBENZO(a,e)-FLUORANTHENE

TOXICITY DATA with REFERENCE:

mma-sat 100 nmol/L CRNGDP 5,1263,84

dns-mus:emb 1 µmol/L CRNGDP 5,379,84

dnd-mam:lym 297 nmol/L CRNGDP 4,27,83

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and fumes.

BBV000 CAS: 52-49-3 HR: 3

BENZHEXOL HYDROCHLORIDE

mf: $C_{20}H_{31}NO \cdot ClH$ mw: 337.98

PROP: Mp: 258.5° (decomp). Sltly sol in Et_2O , C_6H_6 .

SYNS: APARKAN □ ARTANE □ ARTANE HYDROCHLORIDE □ ARTANE TRIHEXYPHENIDYL □ BENZHEXOL CHLORIDE □ CYCLODOL □ α-CYCLOHEXYL-α-PHENYL-1-PIPERIDINE PROPANOL HYDROCHLORIDE □ PACITANE □ PARALEST □ PARGITAN □ PARKINSAN □ PARKOPAN □ PERAGIT □ 1-PHENYL-1-CYCLOHEXYL-3-PIPERIDYL-1-PROPANOL HYDROCHLORIDE □ PIPANOL □ 3-(1-PIPERIDYL)-1-CYCLOHEXYL-1-PHENYL-1-PROPANOL HYDROCHLORIDE □ ROMPARKIN □ SEDRENA □ TREMIN □ TRIESIFENIDILE □ TRIEXIFENIDILA □ TRIHEXYLPHENIDYL HYDROCHLORIDE □ TRIPHEDINON □ TRIPHENIDYL □ TSIKLODOL

TOXICITY DATA with REFERENCE:

orl-wmn TDLo:800 µg/kg:BAH BJPYAJ 145,300,84
 orl-man TDLo:400 µg/kg/1W-I:EYE NEURAI 37,832,87
 ipr-rat LD50:195 mg/kg 27ZQAG -,311,72
 ivn-rat LD50:30 mg/kg 27ZQAG -,311,72
 orl-mus LD50:217 mg/kg NIIRDN 6,525,82
 ipr-mus LD50:150 mg/kg PHARAT 37,483,82
 scu-mus LD50:152 mg/kg 27ZQAG -,311,72
 ivn-mus LD50:39 mg/kg 27ZQAG -,311,72
 scu-gpg LD50:320 mg/kg AIPTAK 137,375,62

SAFETY PROFILE: Poison by ingestion, intraperitoneal, intravenous, and subcutaneous routes. An anticholinergic agent which causes human psychotropic effects. Human systemic effects by ingestion: distorted perceptions, eye effects, hallucinations, toxic psychosis. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

**BBV250 CAS: 613-94-5 HR: 3
 BENZHYDRAZIDE**

mf: C₇H₈N₂O mw: 136.17

PROP: Crystals from water. Mp: 112.5°. Sol in water, acids, EtOH, C₆H₆, and Me₂CO.

SYNS: BENZOHYDRAZIDE □ BENZOHYDRAZINE □ BENZOIC HYDRAZIDE □ BENZOYL HYDRAZIDE

TOXICITY DATA with REFERENCE:

scu-mus LD50:122 mg/kg JPETAB 122,110,58
 scu-rbt LDLo:102 mg/kg JPETAB 30,87,27

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by subcutaneous route. Questionable carcinogen with experimental carcinogenic and neoplastigenic data. Violent reaction with benzeneseleninic acid. When heated to decomposition it emits toxic fumes of NO_x.

**BBV500 CAS: 58-73-1 HR: 3
 BENZHYDRYL**

mf: C₁₇H₂₁NO mw: 255.39

PROP: Oil. Bp: 163–167° @ 3 mm.

SYNS: ALERYL □ ALLEDRYL □ ALLERGAN B □ ALLERGEVAL □ ALLERGICAL □ ALLERGIN □ ALLERGINA □ ALLERGIVAL □ AMIDRYL □ ANTISTOMINUM □ ANTOMIN □ AUTOMIN □ BAGAODRYL □ BARAMINE □ BENA □ BENACHLOR □ BENADON □ BENADRIN □ BENADRYL □ BEN-ALLERGIN □ BENAPON □ BENODIN □ BENODINE □ BENYLAN □ BENZANTINE □ BENZHYDRAMINE □ BENZHYDRAMINUM □ BENZHYDRIL □ o-BENZHYDRYLDI-METHYLAMINOETHANOL □ 2-(BENZHYDRYLOXY)-N,N-DIMETHYLETHYLAMINE □ 2-(BENZOHYDRYLOXY)-N,N-DIMETHYLETHYLAMINE □ BETRAMIN □ DABYLEN □ DEBENDRIN □ DERMISTINE □ DERMODRIN □ DESENTOL □ DIABENYL □ DIABYLEN □ DIBONDRI □ DIFEDRYL □ DIFENHYDRAMIN □ DIFENIDRAMINA (ITALIAN) □ DIHIDRAL □ DIMEDROL □ DIMEDRYL □ β-DIMETHYL-AMINO-AETHYL-BENZHYDRYL-AETHER (GERMAN) □ β-DIMETHYLAMINOETHANOL DIPHENYLMETHYL ETHER □ α-(2-DIMETHYLAMINOETHOXY)DIPHENYLMETHANE □ β-DIMETHYLAMINOETHYLBENZHYDRYLETHER □ DIPHANTINE □ DIPHENYLHYDRAMINE □ 2-(DIPHENYLMETHOXY)-N,N-DIMETHYLETHYLAMINE □ DRYISTAN □ DRYLISTAN □ DYLAMON □ ETANAUTINE □ HISTAXIN □ HYADRINE □ IBIODRAL □ MEDIDRYL □ MEPHADRYL □

NAUSEN □ PROBEDRYL □ RESTAMIN □ RESTAMINE □ RIGIDIL □ RIGIDYL □ S51 □ SYNTEDRIL □ SYNTODRIL □ VENA

TOXICITY DATA with REFERENCE:

dnd-esc 1 mg/L KHFZAN 16(10),11,82
 dni-hmn:fbr 12,500 µg/L DNSYAG 29,829,68
 oms-hmn:fbr 12,500 µg/L DNSYAG 29,829,68
 cyt-hmn:fbr 100 mg/L ACYTAN 16,41,72
 orl-hmn TDLo:714 µg/kg:BAH DDREDK 27,33,92
 unr-man LDLo:7353 µg/kg 85DCAI 2,73,70
 orl-rat LD50:390 mg/kg RPTOAN 40,42,77
 ipr-rat LD50:280 mg/kg IJMRAQ 59,614,71
 orl-mus LD50:160 mg/kg CHTPBA 7,224,72
 ipr-mus LD50:56 mg/kg YKYUA6 34,27,83
 scu-mus LD50:50 mg/kg BCFAAI 111,293,72
 ivn-mus LD50:29 mg/kg RPTOAN 40,42,77
 ipr-gpg LD50:75 mg/kg THERAP 28,767,73
 scu-gpg LD50:56 mg/kg ARZNAD 4,189,54

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Deadly human poison by an unspecified route. Poison by ingestion, intravenous, intraperitoneal, and subcutaneous routes. Experimental reproductive effects. Human systemic effects by ingestion: somnolence, alteration of operant conditioning, changes in psychophysiological tests. Human mutation data reported. When heated to decomposition it emits toxic fumes of NO_x. See also ETHERS.

**BBV750 CAS: 3733-63-9 HR: 3
 1-BENZHYDRYL-4-(2-(2-HYDROXYETHOXY)ETHYL)PIPERAZINE**

mf: C₂₁H₂₈N₂O₂ mw: 340.51

PROP: Bp: 185° @ 0.005 mm.

SYNS: DECLOXIZINE □ 1-(DIPHENYLMETHYL)-4-(2-(2-HYDROXYETHOXY)ETHYL)PIPERAZINE □ 2-(2-(4-DIPHENYLMETHYL)-1-PIPERAZINYL)ETHOXY)ETHANOL HYDROXYDIETHYLPHENAMINE □ UCB 1402

TOXICITY DATA with REFERENCE:

orl-rat LD50:840 mg/kg ARZNAD 18,1002,68
 ipr-rat LD50:103 mg/kg ARZNAD 18,1002,68
 ivn-rat LD50:47 mg/kg ARZNAD 18,1002,68
 orl-mus LD50:470 mg/kg ARZNAD 18,1002,68
 ipr-mus LD50:135 mg/kg ARZNAD 18,1002,68
 ivn-mus LD50:45 mg/kg ARZNAD 18,1002,68

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.

**BBW000 CAS: 19974-69-7 HR: 3
 2-BENZHYDRYL-3-HYDROXY-N-METHYL PIPERIDINE HYDROCHLORIDE**

mf: C₁₉H₂₃NO•ClH mw: 317.89

SYN: SCH 5472

TOXICITY DATA with REFERENCE:

orl-rat LD50:1 mg/kg 27ZQAG -,301,72
 orl-dog LD50:4 mg/kg 27ZQAG -,301,72

SAFETY PROFILE: Poison by ingestion. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BBW250 CAS: 16136-32-6 HR: 3
2-(BENZHYDRYLOXYETHYL)GUANIDINEmf: C₁₆H₁₉N₃O mw: 269.38**TOXICITY DATA with REFERENCE:**

orl-mus LD50:375 mg/kg JMCAR 6,705,63

scu-mus LD50:125 mg/kg JMCAR 6,705,63

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.**BBW500 CAS: 132-69-4 HR: 3**
BENZIDAMINE HYDROCHLORIDEmf: C₁₉H₂₃N₃O•ClH mw: 345.91**PROP:** Mp: 160°. Very sol in H₂O.**SYNS:** AF 864 □ BENALGIN □ BENZINDAMINE HYDROCHLORIDE □ BENZYDAMINE HYDROCHLORIDE □ 1-BENZYL-3-γ-DIMETHYLAMINOPROPOXY-1H-INDAZOLE HYDROCHLORIDE □ 1-BENZYL-3-(3-(DIMETHYLAMINO)PROPOXY)-1H-INDAZOLE HYDROCHLORIDE □ BENZYRIN □ DIFFLAM □ N,N-DIMETHYL-3-(1-PHENYL METHYL)-1H-INDAZOL-3-YL)OXY-1-PROPANAMINE HYDROCHLORIDE □ DORINAMIN □ ENZAMIN □ EPIROTIN □ IMOTRYL □ INDOLIN □ RIRILIM □ RIRIPEN □ SALYZORON □ TAMAS □ TANTUM □ VERAX**TOXICITY DATA with REFERENCE:**

eye-rbt 200 mg rns MOD ARZNAD 22,724,72

orl-cld TDLo:50 mg/kg ATXKA8 23,215,68

orl-rat LD50:740 mg/kg YKKZAJ 99,240,79

scu-rat LD50:720 mg/kg OYYAA2 2,70,68

ipr-rat LD50:100 mg/kg TXAPA9 10,148,67

ivn-rat LD50:43,500 µg/kg OYYAA2 2,70,68

orl-mus LD50:440 mg/kg OYYAA2 16,1011,78

ipr-mus LD50:110 mg/kg TXAPA9 10,148,67

scu-mus LD50:218 mg/kg TXAPA9 10,148,67

ivn-mus LD50:33 mg/kg TXAPA9 10,148,67

SAFETY PROFILE: Poison by intraperitoneal, subcutaneous, and intravenous routes. Moderately toxic by ingestion. An experimental teratogen. Other experimental animal reproductive effects. An eye irritant. A nonsteroidal anti-inflammatory analgesic. When heated to decomposition it emits very toxic fumes of HCl and NO_x.**BBW750 CAS: 59-98-3 HR: 3**
BENZIDAZOLmf: C₁₀H₁₂N₂ mw: 160.24**PROP:** Crystals from pet ether. Mp: 66–68°.**SYNS:** ARTONIL □ BENZAZOLINE □ 2-BENZYL-2-IMIDAZOLINE □ 2-BENZYL-4,5-IMIDAZOLINE □ 2-BENZYL-4,5-IMIDAZOLINE HYDROCHLORIDE □ CLORIDRATO DI-2-BENZIL-4,5-IMIDAZOLINA (TALIAN) □ DIVASCOL □ IMIDALIN □ KASIMID □ LAMBRIL □ OLITENSOL □ PERIPHERINE □ PHENYLMETHYLIMIDAZOLINE □ PREFAXIL □ PRISCOL □ PRISCOLINE □ TOLAZOLINE □ VASIMID □ VASODIL □ VASODILATAN**TOXICITY DATA with REFERENCE:**

cyt-ham:lng 62,500 µg/L GMCRC 27,95,81

orl-mus LD50:350 mg/kg CPBTAL 22,514,74

ipr-mus LD50:160 mg/kg PBPHAW 1,542,65

ivn-mus LD50:40 mg/kg RPTOAN 37,198,74

SAFETY PROFILE: Poison by ingestion, intraperitoneal, and intravenous routes. Mutation datareported. When heated to decomposition it emits toxic fumes of NO_x.**BBX000 CAS: 92-87-5 HR: 3**
BENZIDINE**DOT:** UN 1885mf: C₁₂H₁₂N₂ mw: 184.26**PROP:** Grayish-yellow, crystalline powder; white or sltly reddish crystals, powder, or leaf from water or alc. Mp: 127.5–128.7° @ 740 mm, bp: 401.7°, d: 1.250 @ 20°/4°.**SYNS:** BENZIDIN (CZECH) □ BENZIDINA (ITALIAN) □ BENZYDYNA (POLISH) □ p,p'-BIANILINE □ 4,4'-BIANILINE □ (1,1'-BIPHENYL)-4,4'-DIAMINE (9CI) □ 4,4'-BIPHENYLDIAMINE □ 4,4'-BIPHENYLENEDIAMINE □ C.I. 37225 □ C.I. AZOIC DIAZO COMPONENT 112 □ p,p'-DIAMINOBIIPHENYL □ 4,4'-DIAMINO BIIPHENYL □ 4,4'-DIAMINO-1,1'-BIPHENYL □ p-DIAMINO DIPHENYL □ 4,4'-DIAMINODIPHENYL □ p,p'-DIANILINE □ 4,4'-DIPHENYLENEDIAMINE □ FAST CORINTH BASE B □ NCI-C03361 □ RCRA WASTE NUMBER U021**TOXICITY DATA with REFERENCE:**

dnd-hmn:fbr 3 mmol/L ENMUDM 7,267,85

dnd-rat-ipr 63 mg/kg CRNGDP 6,1285,85

msc-mus:lym 500 µg/L MUREAV 125,291,84

dns-ham:lvr 20 nmol/L MUREAV 136,255,84

oms-dog:oth 100 µmol/L CNREA8 44,1893,84

ihl-man TCLo:17,600 µg/m³/14Y-C:CAR,KID AEHLAU 27,1,73

orl-rat LD50:309 mg/kg NTIS** PB214-270

orl-mus LD50:214 mg/kg NTIS** PB214-270

ipr-mus LD50:110 mg/kg PMRSDJ 1,682,81

orl-dog LDLo:200 mg/kg AEXPBL 58,167,1907

orl-rbt LDLo:200 mg/kg AEXPBL 58,167,1907

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Human Limited Evidence IMEMDT 1,80,72; Human Sufficient Evidence IMEMDT 29,149,82; Animal Sufficient Evidence IMEMDT 1,80,72; IMEMDT 29,149,82. EPA Genetic Toxicology Program. Community Right-To-Know List. Reported in EPA TSCA Inventory.**OSHA PEL:** OSHA: Cancer Suspect Agent**ACGIH TLV:** Confirmed Human Carcinogen**DFG MAK:** Human Carcinogen**DOT CLASSIFICATION:** 6.1; Label: Poison**SAFETY PROFILE:** Confirmed human carcinogen producing bladder tumors. Experimental carcinogenic and tumorigenic data. Poison by ingestion and intraperitoneal routes. Human mutation data reported. Can cause damage to blood, including hemolysis and bone marrow depression. On ingestion causes nausea and vomiting, which may be followed by liver and kidney damage. Any exposure is considered extremely hazardous. When heated to decomposition it emits highly toxic fumes of NO_x. See also AROMATIC AMINES.**ANALYTICAL METHOD:** For occupational chemical analysis use OSHA: #ID-65 or NIOSH: Benzidine in Urine (TLC), 8304; Benzidine in Urine (GC), 8306.**BBX250 CAS: 16993-94-5 HR: 2**
3,3'-BENZIDINE DICARBOXYLIC ACID, DISODIUM SALTmf: C₁₄H₁₀N₂O₄•2Na mw: 316.24

SYN: 4,4'-DIAMINO-3,3'-BIPHENYLDICARBOXYLIC ACID DISODIUM SALT

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x and Na_2O .

BBX500 CAS: 117-61-3 HR: 2
2,2'-BENZIDINEDISULFONIC ACID

mf: $\text{C}_{12}\text{H}_{12}\text{N}_2\text{O}_6\text{S}_2$ mw: 344.38

PROP: Prisms.

SYNS: 6,6'-BIMETANILIC ACID \square 4,4'-DIAMINOBIIPHENYL-2,2'-DISULFONIC ACID \square 4,4'-DIAMINO-2,2'-

BIPHENYLDISULFONIC ACID \square 4,4'-DIAMINODIPHENYL-2,2'-DISULFONIC ACID \square 2,2'-DISULFOBENZIDINE \square KYSELINA BENZIDIN-2,2'-DISULFONOVA (CZECH)

TOXICITY DATA with REFERENCE:

eye-rbt 500 mg/24H SEV 28ZPAK -,191,72

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A severe eye irritant. See also SULFONATES. When heated to decomposition it emits very toxic fumes of SO_x and NO_x .

BBX750 CAS: 531-85-1 HR: 2
BENZIDINE HYDROCHLORIDE

mf: $\text{C}_{12}\text{H}_{12}\text{N}_2 \cdot 2\text{ClH}$ mw: 257.18

PROP: Leaflets. Sol in H_2O .

SYNS: (1,1'-BIPHENYL)-4,4'-DIAMINE, DIHYDROCHLORIDE \square DIHIDROCLORURO de BENZIDINA (SPANISH)

TOXICITY DATA with REFERENCE:

mno-sat 100 nmol/plate MUREAV 136,33,84

sce-ham-ipr 12,500 $\mu\text{g}/\text{kg}$ MUREAV 113,33,83

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic and tumorigenic data. Human mutation data reported. When heated to decomposition it emits very toxic fumes of HCl and NO_x .

BBY000 CAS: 531-86-2 HR: 3
BENZIDINE SULFATE

mf: $\text{C}_{12}\text{H}_{12}\text{N}_2 \cdot \text{H}_2\text{O}_4\text{S}$ mw: 282.34

PROP: Hair dye.

SYN: (1,1'-BIPHENYL)-4,4'-DIAMINE SULFATE (1:1)

OSHA PEL: OSHA: Carcinogen

SAFETY PROFILE: Confirmed human carcinogen with experimental carcinogenic data. See also BENZIDINE and SULFATES. When heated to decomposition it emits toxic fumes of SO_x and NO_x .

BBY250 CAS: 2051-89-0 HR: 2
BENZIDINE-3-SULFURIC ACID

mf: $\text{C}_{12}\text{H}_{12}\text{N}_2\text{O}_3\text{S}$ mw: 264.32

PROP: Crystals.

SYNS: BENZIDINE-3-SULPHURIC ACID \square 4,4'-DIAMINO-3-BIPHENYL-3-SULFONIC ACID \square 4,4'-DIAMINO-3-DIPHENYLYL HYDROGEN SULFATE \square 3-SULFOBENZIDINE

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also SULFATES.

When heated to decomposition it emits very toxic fumes of NO_x and SO_x .

BBY300 HR: 2
BENZIDINE SULPHATE and HYDRAZINE-BENZENE

mf: $\text{C}_6\text{H}_8\text{N}_2 \cdot \text{C}_{12}\text{H}_{12}\text{N}_2 \cdot \text{H}_2\text{O}_4\text{S}$ mw: 390.50

SYN: HYDRAZINE-BENZENE and BENZIDINE SULFATE

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic data. When heated to decomposition it emits toxic fumes of NO_x and SO_x .

BBY500 CAS: 3365-94-4 HR: 2
BENZIDIN-3-YL ESTER SULFURIC ACID

mf: $\text{C}_{12}\text{H}_{12}\text{N}_2\text{O}_4\text{S}$ mw: 280.32

SYNS: BENZIDIN-3-YL HYDROGEN SULFATE \square 4,4'-DIAMINO-3-DIPHENYLYL HYDROGEN SULFATE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also ESTERS and SULFURIC ACID. When heated to decomposition it emits very toxic fumes of NO_x and SO_x .

BBY750 CAS: 134-81-6 HR: 2
BENZIL

mf: $\text{C}_{14}\text{H}_{10}\text{O}_2$ mw: 210.24

PROP: Yellow crystals from alc. Mp: 95° , bp: $346\text{--}348^\circ$, d: 1.23 @ $15^\circ/4^\circ$, vap press: 1 mm @ 128.4° .

SYNS: DIBENZOYL \square DIPHENYL- α,β -DIKETONE \square 1,2-DIPHENYLETHANEDIONE \square DIPHENYLGLYOXAL

TOXICITY DATA with REFERENCE:

eye-rbt 100 mg/24H SEV 28ZPAK -,43,72

orl-mus LD50: >3 g/kg IYKEDH 15,359,84

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low toxicity by ingestion. An eye irritant. Combustible. When heated to decomposition it emits acrid smoke and irritating fumes. See also KETONES.

BBY990 CAS: 76-93-7 HR: 2
BENZILIC ACID

mf: $\text{C}_{14}\text{H}_{12}\text{O}_3$ mw: 228.26

PROP: White powder. Mp: $150\text{--}153^\circ$.

SYNS: ACIDE DIPHENYLHYDROXYACETIQUE \square BENZENEACETIC ACID, α -HYDROXY- α -PHENYL-(9CI) \square DIPHENYLGLYCOLIC ACID \square α - α -DIPHENYLGLYCOLIC ACID \square DIPHENYLHYDROXYACETIC ACID \square HYDROXYDI PHENYL ACETIC ACID \square α -HYDROXY- α -PHENYLBENZENEACETIC ACID

TOXICITY DATA with REFERENCE:

orl-mus LD50:2 g/kg AIPTAK 116,154,58

scu-mus LD50:1300 mg/kg AIPTAK 116,154,58

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by subcutaneous route. Slightly toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BCA000 CAS: 57-37-4 HR: 3
BENZILIC ACID- β -DIETHYLAMINOETHYL ESTER HYDROCHLORIDE

mf: $C_{20}H_{25}NO_3 \cdot ClH$ mw: 363.92**PROF:** Crystals from Me_2CO . Mp: 177–178°. Sol in H_2O ; insol in Et_2O .

SYNS: ACTOZINE □ AMIOYL □ AMISYL □ AMITAKON □ AMIZIL HYDROCHLORIDE □ ARCADINE □ AY-5406 □ BENACTIZINE HYDROCHLORIDE □ BENACTYZIN (CZECH) □ BENACTYZINE CHLORIDE □ BENACTYZINE HYDROCHLORIDE □ BENAKTIN □ BENZILATE DU DIETHYL-AMINO-ETHANOL CHLORHYDRATE (FRENCH) □ CAFRON □ CEDAD □ CEVANOL □ DESTENDO □ β -DIETHYLAMINO-ETHYL BENZILATE HYDROCHLORIDE □ 2-DIETHYLAMINO-ETHYL BENZILATE HYDROCHLORIDE □ 2-DIETHYLAMINO-ETHYL DIPHENYLGLYCOLATE HYDROCHLORIDE □ 2-(DIPHENYL-HYDROXYACETOXY)ETHYL-DIETHYL-AMMONIUMCHLORID (CZECH) □ DIPHENYLGLYCOLLIC ACID-2-(DIETHYL AMINO) ETHYL ESTER HYDROCHLORIDE □ FOBEX □ IBIOTYZIL □ KATRON □ LEUCIDIL □ NERVACTON □ NERVATIL □ NEURAKTIL □ NEUROBENZIL □ NEUROLEPTONE □ NUTINAL □ PARASAN □ PARPON □ PHOBEX □ PROCALM □ STOIKON □ SUAVITIL □ TRANQUILLIN □ VALLADAN □ WIN 5606

TOXICITY DATA with REFERENCE:

orl-hmn TDL₀:14 $\mu g/kg$:CNS 27ZQAG -,363,72
 orl-rat LD50:184 mg/kg TXAPA9 1,42,59
 ipr-rat LD50:100 mg/kg APTOA6 11,405,55
 orl-mus LD50:160 mg/kg 27ZQAG -,363,72
 ipr-mus LD50:76 mg/kg JPETAB 74,274,42
 scu-mus LD50:250 mg/kg 27ZQAG -,363,72
 ivn-mus LD50:14,300 $\mu g/kg$ 28ZPAK -,253,72
 idr-mus LD50:350 mg/kg AIPTAK 59,149,38
 ipr-rbt LD50:100 mg/kg APTOA6 11,405,55
 ivn-rbt LD50:15 mg/kg 27ZQAG -,363,72
 ipr-gpg LD50:100 mg/kg APTOA6 11,405,55

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by ingestion, intraperitoneal, subcutaneous, intradermal, and intravenous routes. Human systemic effects by ingestion of very small amounts: toxic psychosis. Experimental reproductive effects. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BCA250 CAS: 55798-64-6 HR: 3
BENZILIC ACID,-3-(2,5-DIMETHYL-1-PYRROL-IDINYL)PROPYL ESTER, HYDROCHLORIDE

mf: $C_{23}H_{29}NO_3 \cdot ClH$ mw: 403.99**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:77 mg/kg EJMCA5 9,404,74
 ivn-mus LD50:8500 $\mu g/kg$ EJMCA5 9,404,74

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. See also ESTERS. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BCA300 CAS: 14090-77-8 HR: 3
 α -BENZIL MONOXIME

mf: $C_{14}H_{11}NO_2$ mw: 225.26

SYNS: α -BENZIL MONOOXIME □ BENZIL, MONOXIME □ BENZIL, MONOOXIME □ BENZIL, β -MONOXIME □ BENZIL, OXIME □ 1,2-DIPHENYLETHANEDIONE MONOXIME □ ETHANEDIONE, DIPHENYL-, MONOOXIME

TOXICITY DATA with REFERENCE:

orl-rat LDLo:500 mg/kg NCNSA6 5,27,1953

ivn-mus LD50:56 mg/kg CSLNX* NX#03757

SAFETY PROFILE: A poison by intravenous route. Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x .

BCA375 CAS: 73954-17-3 HR: 3
8-BENZILOYLOXY-6,10-ETHANO-5-AZONIASPIRO(4.5)DECANE CHLORIDE

mf: $C_{25}N_3NO_3 \cdot Cl$ mw: 428.01

SYNS: 6,10-ETHANO-5-AZONIASPIRO(4.5)DECAN-8-OL CHLORIDE BENZILATE □ 3-HYDROXY-SPIRO(8-AZONIABICYCLO(3.2.1)OCTANE-8,1'-PYRROLIDINIUM CHLORIDE) BENZILATE

TOXICITY DATA with REFERENCE:

orl-rat LD50:1501 mg/kg IYKEDH 4,90,73
 ipr-rat LD50:103 mg/kg ARZNAD 16,1581,66
 scu-rat LD50:707 mg/kg IYKEDH 4,90,73
 ivn-rat LD50:15,500 $\mu g/kg$ IYKEDH 4,90,73
 orl-mus LD50:750 mg/kg ARZNAD 16,1581,66
 ipr-mus LD50:50 mg/kg IYKEDH 4,90,73
 scu-mus LD50:203 mg/kg IYKEDH 4,90,73
 ivn-mus LD50:11,200 $\mu g/kg$ IYKEDH 4,90,73
 ims-mus LD50:89 mg/kg ARZNAD 16,1581,66

SAFETY PROFILE: Poison by subcutaneous, intramuscular, intravenous, and intraperitoneal routes. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of Cl^- and NO_x .

BCB000 CAS: 67360-95-6 HR: 3
4-BENZILOYLOXY-1,1,2,2,6-PENTAMETHYL PIPERIDINIUM CHLORIDE (β FORM)

mf: $C_{24}H_{32}NO_3 \cdot Cl$ mw: 418.02

SYNS: 4-BENZILYLOXY-1,2,2,6-TETRAMETHYLPYPERIDINE METHOCHLORIDE (β FORM) □ 4-((HYDROXYDIPHENYL-ACETYL)OXY)-1,1,2,2,6-PENTAMETHYLPYPERIDINIUM CHLORIDE (β FORM)

TOXICITY DATA with REFERENCE:

orl-mus LD50:1000 mg/kg JPETAB 85,85,45
 ipr-mus LD50:75 mg/kg JPETAB 85,85,45
 scu-mus LD50:325 mg/kg JPETAB 85,85,45

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BCB250 CAS: 67360-95-6 HR: 3
4-BENZILOYLOXY-1,1,2,2,6-PENTAMETHYL PIPERIDINIUM CHLORIDE (α FORM)

mf: $C_{24}H_{32}NO_3 \cdot Cl$ mw: 418.02

SYNS: 4-BENZILYLOXY-1,2,2,6-TETRAMETHYLPYPERIDINE METHOCHLORIDE (α FORM) □ 4-((HYDROXYDIPHENYL-ACETYL)OXY)-1,1,2,2,6-PENTAMETHYLPYPERIDINIUM CHLORIDE (α FORM)

TOXICITY DATA with REFERENCE:

ipr-mus LD50:800 mg/kg JPETAB 85,85,45
 scu-mus LD50:375 mg/kg JPETAB 85,85,45

SAFETY PROFILE: Poison by subcutaneous route. Moderately toxic by intraperitoneal route. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BCB750 CAS: 51-17-2 HR: 3
BENZIMIDAZOLE

mf: C₇H₆N₂ mw: 118.15**PROP:** Tabular crystals or plates. Mp: 170.5°, bp: >360°. Sol in alc; sparingly sol in water.**SYNS:** 3-AZAINDOLE □ AZINDOLE □ o-BENZIMIDAZOLE □ 1H-BENZIMIDAZOLE (9CI) □ BENZIMINAZOLE □ 1,3-BENZO-DIAZOLE □ BENZOIMIDAZOLE □ BZI □ 1,3-DIAZAINDENE □ N,N'-METHENYL-o-PHENYLENEDIAMINE □ NSC-759**TOXICITY DATA with REFERENCE:**

mmo-sat 250 µg/plate CHIMAD 27,68,73

mmo-esc 1 mg/disc APMBAY 6,23,58

dnd-esc 15 mmol/L/48H ANBCA2 75,45,76

pic-esc 1 g/L ZAPOAK 12,583,72

orl-rat LDLo:500 mg/kg NCNSA6 5,22,53

ipr-rat LD50:385 mg/kg AIPTAK 95,123,53

orl-mus LD50:2910 mg/kg JPETAB 105,486,52

ivn-mus LD50:280 mg/kg 29QHAQ -,246,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion. Mutation data reported. When heated to decomposition it emits highly toxic fumes of NO_x.**BCC000 CAS: 4414-88-4 HR: 3
2-BENZIMIDAZOLEACETONITRILE**mf: C₉H₇N₃ mw: 157.19**PROP:** Used as a dyestuff, pigment, and medicine. Mp: 205–207°.**SYNS:** 2-BENZIMIDAZOLYLACETONITRILE □ 2-KYANMETHYLBENZIMIDAZOL (CZECH)**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:56 mg/kg CSLNX* NX#04148

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Cyanide and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Poison by intravenous route. See also NITRILES. When heated to decomposition it emits toxic fumes of NO_x.**BCC050 CAS: 4331-29-7 HR: D
1H-BENZIMIDAZOLE-4-AMINE**mf: C₇H₇N₃ mw: 133.17**SYNS:** 4-AMINOBENZIMIDAZOLE □ BENZIMIDAZOLE, 4-AMINO- □ BENZIMIDAZOLE, 4(OR 7)-AMINO-**TOXICITY DATA with REFERENCE:**

mic-sat 100 µLg/plate MUREAV 28,273,1975

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.**BCC100 CAS: 18538-45-9 HR: D
2-BENZIMIDAZOLECARBAMIC ACID**mf: C₈H₇N₃O₂ mw: 177.18**PROP:** Solid. Mp: 299°.**SYNS:** BENZIMIDAZOLE CARBAMATE □ 2-BENZIMID-AZOLYL CARBAMIC ACID □ CARBAMIC ACID, 1H-BENZ-IMIDAZOL-2-YL-**SAFETY PROFILE:** An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.**BCC250 CAS: 6898-43-7 HR: 2****BENZIMIDAZOLE METHYLENE MUSTARD**mf: C₁₄H₁₉Cl₂N₃•ClH mw: 336.72**SYNS:** BENZIMIDAZOLE MUSTARD □ 2-(BIS(2-CHLOROETHYL)AMINOMETHYL)-5,5-DIMETHYL BENZIMIDAZOLE HYDROCHLORIDE □ 2-(DI-2-CHLOROETHYL)AMINO-METHYL-5,6-DIMETHYLBENZIMID AZOLE □ NSC-23892**SAFETY PROFILE:** Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits very toxic fumes of HCl and NO_x.**BCC500 CAS: 583-39-1 HR: 3
2-BENZIMIDAZOLETHIOL**mf: C₇H₆N₂S mw: 150.21**PROP:** Plates from alc (aq). Mp: 298°. Sol in EtOH; sltly sol in H₂O.**SYNS:**

□ ANTIEGENE MB □ ANTIOXIDANT MB (CZECH) □ AOMB □ ASM MB □ 2-MERCAPTOBENZIMIDAZOLE □ MERCAPTO-BENZOIMIDAZOLE □ 2-MERCAPTOBENZOIMIDAZOLE □ MERKAPTOBENZIMIDAZOL (CZECH) □ NCI-C60980 □ o-PHENYLENETHIOUREA □ USAF EK-6540 □ USAF XF-21

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,168,72

eye-rbt 500 mg/24H MLD 28ZPAK -,168,72

orl-mus LD50:750 mg/kg FRZKAP 17(1),36,62

ipr-mus LD50:200 mg/kg NTIS** AD277-689

ivn-mus LD50:180 mg/kg CSLNX* NX#04376

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion. Skin and eye irritant. When heated to decomposition it emits toxic fumes of SO_x and NO_x. See also MERCAPTANS.**BCD125 CAS: 52096-22-7 HR: 3
BENZIMIDAZOLIUM-1-NITROIMIDATE**mf: C₇H₅N₄O₂ mw: 177.14**SAFETY PROFILE:** Explodes at its mp: 169°C. Upon decomposition it emits toxic fumes of NO_x.**BCD325 CAS: 21035-25-6 HR: 3
1-(2-BENZIMIDAZOLYL)-3-METHYLUREA**mf: C₉H₁₀N₄O mw: 190.23**SYN:** BCM (NH)**TOXICITY DATA with REFERENCE:**

oms-hmn:leu 1 mg/L THERAP 31,505,76

oms-hmn:oth 2 mg/L THERAP 31,505,76

ivn-mus LD50:56 mg/kg CSLNX* NX#03246

SAFETY PROFILE: Poison by intravenous route. Human mutation data reported. An experimental teratogen. When heated to decomposition it emits toxic fumes of NO_x.**BCD750 CAS: 642-72-8 HR: 3
BENZINDAMINE**mf: C₁₉H₂₃N₃O mw: 309.45**PROP:** Bp: 160° @ 0.05 mm.**SYNS:** BENZYDAMINE □ 1-BENZYL-3-(3-(DIMETHYL-AMINO)PROPOXY)-1H-INDAZOLE**TOXICITY DATA with REFERENCE:**

orl-rat LD50:9500 mg/kg ARZNAD 22,711,72

orl-mus LD50:460 mg/kg JMCMA 15,923,72

ipr-mus LD50:109 mg/kg JMCAR 15,471,72
 scu-mus LD50:445 ng/kg OYYAA2 6,1285,72
 ivn-mus LD50:25 mg/kg OYYAA2 6,1285,72

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.

BCE000 CAS: 208-07-1 HR: 3
BENZ(e)INDENO(1,2-b)INDOLE

mf: C₁₉H₁₁N mw: 253.31

SYN: 4,5-BENZO-2,3-1',2'-INDENOINDOLE (FRENCH)

TOXICITY DATA with REFERENCE:

scu-mus LDLo:40 mg/kg BAFAAG 42,3,55

SAFETY PROFILE: Poison by subcutaneous route. Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x.

BCE250 CAS: 5585-71-7 HR: 3
BENZINDOPYRINE HYDROCHLORIDE

mf: C₂₂H₂₀N₂•ClH mw: 348.90

PROP: Solid. Mp: 199–200°.

SYNS: 4-(1-BENZYL-3-INDOLETHYL)PYRIDINE HYDROCHLORIDE □ 1-BENZYL-3-(2-(4-PYRIDYL)ETHYL)INDOLE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-hmn TDLo:714 µg/kg/D:PSY AMCTAH 6,521,59

ipr-mus LD50:520 mg/kg JPETAB 125,122,59

ivn-mus LD50:98 mg/kg JPETAB 125,122,59

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by intraperitoneal route. Human psychotropic effects via ingestion. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BCE475 CAS: 2634-33-5 HR: 2
1,2-BENZISOTHIAZOL-3(2H)-ONE

mf: C₇H₅NOS mw: 151.19

SYNS: 1,2-BENZISOTHIAZOLIN-3-ONE □ PROXEL PL

TOXICITY DATA with REFERENCE:

orl-rat LD50:1020 mg/kg PLRCAT 3,385,71

orl-mus LD50:1150 mg/kg PLRCAT 3,385,71

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x.

BCE500 CAS: 81-07-2 HR: 3
1,2-BENZISOTHIAZOL-3(2H)-ONE-1,1-DIOXIDE

mf: C₇H₅NO₃S mw: 183.19

PROP: White crystals or powder from water; odorless with sweet taste. Mp: 224° (decomp), bp: subl. Sol in water, alc, chloroform, and ether.

SYNS: ANHYDRO-*o*-SULFAMINEBENZOIC ACID □ 3-BENZISOTHIAZOLINONE-1,1-DIOXIDE □ *o*-BENZOIC SULPHIMIDE □ *o*-BENZOSULFIMIDE □ BENZOSULPHIMIDE □ BENZO-2-SULPHIMIDE □ *o*-BENZOYL SULFIMIDE □ *o*-BENZOYL SULPHIMIDE □ 1,2-DIHYDRO-2-KETOBENZISO SULFONAZOLE □ 1,2-DIHYDRO-2-KETOBENZISO SULPHON AZOLE □ 2,3-DIHYDRO-3-OXOBENZISOSULFONAZOLE □ 2,3-

DIHYDRO-3-OXOBENZISOSULPHONAZOLE □ GARANTOSE □ GLUCID □ GLUSIDE □ HERMESSETAS □ 3-HYDROXY-BENZISO THIAZOL-S,S-DIOXIDE □ INSOLUBLE SACCHARINE □ KANDISET □ NATREEN □ RCRA WASTE NUMBER U202 □ SACARINA □ SACCAHARIMIDE □ SACCHARINA □ SACCHARIN ACID □ SACCHARINE □ SACCHARINOL □ SACCHARINOSE □ SACCHAROL □ SAXIN □ SUCRE EDULCOR □ SUCRETTE □ *o*-SULFOBENZIMIDE □ *o*-SULFOBENZOIC ACID IMIDE □ 2-SULPHOBENZOIC IMIDE □ SYKOSE □ SYNCAL □ ZAHARINA

TOXICITY DATA with REFERENCE:

cyt-smc 200 mg/L NATUAS 294,263,81

dnd-rat:ivr 3 mmol/L SinJF# 26OCT82

dns-rat:ivr 100 pmol/L CRNGDP 5,1547,84

dnd-mus-ipr 100 mg/kg ATSUDG (5),355,82

sce-ham:lng 100 mg/L BJCAAI 45,769,82

orl-mus LD50:17 g/kg EXPEAM 35,1364,79

CONSENSUS REPORTS: IARC Cancer Review:

Group 2B IMEMDT 7,334,87; Human Inadequate Evidence IMEMDT 22,111,80; Animal Sufficient Evidence IMEMDT 22,111,80. EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory. Community Right-To-Know List.

SAFETY PROFILE: Confirmed carcinogen with experimental neoplastigenic and tumorigenic data. Mild acute toxicity by ingestion. Experimental teratogenic and reproductive effects. Mutation data reported. When heated to decomposition it emits toxic NO_x and SO_x.

BCE750 CAS: 68291-97-4 HR: 2
1,2-BENZISOXAZOLE-3-METHANESULFON-AMIDE

mf: C₈H₈N₂O₃S mw: 212.24

PROP: Crystals from EtOAc. Mp: 160–163°.

SYNS: AD-810 □ 3-SULFAMOYLMETHYL-1,2-BENZISOXAZOLE

TOXICITY DATA with REFERENCE:

orl-rat LD50:1992 mg/kg YACHDS 15,4337,87

ipr-rat LD50:733 mg/kg ARZNAD 30,477,80

scu-rat LD50:925 mg/kg YACHDS 15,4337,87

ivn-rat LD50:672 mg/kg YACHDS 15,4337,87

orl-mus LD50:1892 mg/kg ARZNAD 30,477,80

ipr-mus LD50:699 mg/kg ARZNAD 30,477,80

scu-mus LD50:1009 mg/kg YACHDS 15,4337,87

orl-dog LD50:1 g/kg YACHDS 15,4337,87

SAFETY PROFILE: Moderately toxic by ingestion, intraperitoneal, subcutaneous, and intravenous routes. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits very toxic fumes of SO_x and NO_x. An anticonvulsant.

BCE825 CAS: 15301-48-1 HR: 3
BENZITRAMIDE

mf: C₃₁H₃₂N₄O₂ mw: 492.67

PROP: White, crystalline powder. Mp: 145–149°. Also reported as pale yellow amorphous powder, mp: 124.5–126°. Solubility above 1 g/100 mL in ethyl acetate, acetone, benzene, chloroform. Almost insol in water and dilute acids.

SYNS: BEZITRAMIDE □ BURGODIN □ 1-(3-CYANO-3,3-DIPHENYLPROPYL)-4-(2-OXO-3-PROPIONYL-1-BENZIMID AZOLINYL)PIPERIDINE □ 1-(1-(3-CYANO-3,3-DIPHENYL

PROPYL)-4-PIPERIDYL)-3-PROPIONYL-2-BENZIMIDAZOLINONE □ R-4845

TOXICITY DATA with REFERENCE:

orl-rat LD50:141 mg/kg MEIEDD 10,170,83
orl-mus LD50:2101 mg/kg MEIEDD 10,170,83
orl-dog LD50:80 mg/kg ARZNAD 21,862,71
orl-gpg LD50:60,400 µg/kg ARZNAD 21,862,71

CONSENSUS REPORTS: Cyanide and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Poison by ingestion. Caution: May be habit forming. This is a controlled substance (opiate) listed in the U.S. Code of Federal Regulations, Title 21 Part 1308.12 (1985). When heated to decomposition it emits toxic fumes of NO_x and CN⁻.

BCF500 CAS: 1491-10-7 HR: 2 BENZO(f)(1)BENZOTHIENO(3,2-b)QUINOLINE

mf: C₁₉H₁₁NS mw: 285.37

SYN: NAPHTHO(1,2-e)THIANAPHTHENO(3,2-b)PYRIDINE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.

BCF750 CAS: 1491-09-4 HR: 2 BENZO(h)(1)BENZOTHIENO(3,2-b)QUINOLINE

mf: C₁₉H₁₁NS mw: 285.37

SYN: NAPHTHO(2,1-e)THIANAPHTHENO(3,2-b)PYRIDINE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.

BCG000 CAS: 846-35-5 HR: 2 BENZO(e)(1)BENZOTHIOPYRANO(4,3b)-INDOLE

mf: C₁₉H₁₁NS mw: 285.37

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.

BCG250 CAS: 239-01-0 HR: 2 11H-BENZO(a)CARBAZOLE

mf: C₁₆H₁₁N mw: 217.28

PROP: Plates from EtOH. Mp: 226°.

SYN: 1,2-BENZCARBAZOLE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BCG500 CAS: 214-17-5 HR: 2 BENZO(b)CHRYSENE

mf: C₂₂H₁₄ mw: 278.36

PROP: Pale-yellow leaflets from C₆H₆. Mp: 292–294°.

SYNS: 2,3-BENZOCHRYSENE □ 3,4-BENZOTETRACENE □ BENZO(c)TETRAPHENE □ DIBENZO-2,3,7,8-PHENANTHRENE □ 3,4-BENZOTETRAPHENE □ 1,2,6,7-DIBENZOPHENANTHRENE □ 2,3,7,8-DIBENZOPHENANTHRENE

TOXICITY DATA with REFERENCE:

mma-sat 50 µg/plate MUREAV 174,247,86

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data by skin contact. Mutation

data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCG750 CAS: 194-69-4 HR: 2 BENZO(c)CHRYSENE

mf: C₂₂H₁₄ mw: 278.36

PROP: Needles from AcOH. Mp: 126–127°.

SYN: 1,2,5,6-DIBENZPHENANTHRENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BCH000 CAS: 196-78-1 HR: 2 BENZO(g)CHRYSENE

mf: C₂₂H₁₄ mw: 278.36

PROP: Needles from AcOH. Mp: 114–115°.

SYNS: 1,2,3,4-DIBENZOPHENANTHRENE □ 1,2,3,4-DIBENZPHENANTHRENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BCH100 CAS: 84850-16-8 HR: D BENZO(g)CHRYSENE-9,10-OXIDE

SYNS: BENZO(11,12)CHRYSENO(5,6-b)OXIRENE, 1A,13c-DIHYDRO- □ 1A,13c-DIHYDROBENZO(11,12)CHRYSENO(5,6-b)OXIRENE

TOXICITY DATA with REFERENCE:

mic-bac-sat 10 nmol/plate MUREAV 308,135,94

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BCH250 CAS: 5096-19-5 HR: 2 N-6-(3,4-BENZOCOUMARINYL)ACETAMIDE

mf: C₁₅H₁₀NO₃ mw: 252.26

SYN: N-(6-OXO-6H-DIBENZO(b,d)PYRAN-1-YL)ACETAMIDE

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic and tumorigenic data. When heated to decomposition it emits very toxic fumes of NO_x.

BCH300 CAS: 17243-39-9 HR: 3 BENZOCTAMINE

mf: C₁₈H₁₉N mw: 249.38

SYNS: BENZOCTAMINE □ 9,10-ETHANOANTHRACENE-9(10H)-METHANAMINE, N-METHYL- □ ETHANOANTHRACENE-9(10H)-METHYLAMINE, N-METHYL- □ 9,10-ETHANOANTHRACENE-9(10H)-METHYLAMINE, N-METHYL-

TOXICITY DATA with REFERENCE:

orl-rat LD50:600 mg/kg AIPTAK 201,25,1973
ipr-rat LD50:125 mg/kg APPHAX 40,235,1983
scu-rat LD50:240 mg/kg AIPTAK 201,25,1973
ivn-rat LD50:36 mg/kg AIPTAK 201,25,1973
orl-mus LD50:280 mg/kg AIPTAK 201,25,1973
ipr-mus LD50:120 mg/kg APPHAX 40,235,1983
ivn-mus LD50:30 mg/kg AIPTAK 201,25,1973
orl-dog LD50:>200 mg/kg AIPTAK 201,25,1973
ivn-dog LD50:>10 mg/kg AIPTAK 201,25,1973
ivn-cat LD50:>10 mg/kg AIPTAK 201,25,1973
orl-rbt LD50:800 mg/kg AIPTAK 201,25,1973

SAFETY PROFILE: A poison by intraperitoneal, subcutaneous, and intravenous routes. Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x .

BCH750 CAS: 10085-81-1 HR: 3
BENZOCTAMINE HYDROCHLORIDE

mf: $\text{C}_{18}\text{H}_{19}\text{N}\cdot\text{ClH}$ mw: 285.84

PROP: Solid. Mp: 320–322°.

SYNS: BA 30,803 □ 1-METHYLAMINOMETHYLDIBENZO(b,c)BICYCLO(2,2,2)OCTADIENE HYDROCHLORIDE □ N-METHYLETHANOANTHRACENE-9-(10H)-METHYLAMINE HYDROCHLORIDE □ TACITIN

TOXICITY DATA with REFERENCE:

orl-rat LDLo: 700 mg/kg TXAPA9 18,185,71

ivn-rat LD50: 26 mg/kg 27ZQAG -,336,72

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. Experimental teratogenic effects. A sedative and muscle relaxant. When heated to decomposition it emits very toxic fumes of NO_x and HCl .

BCH800 CAS: 6809-93-4 HR: 3
1-BENZOCYCLOBUTENYL n-BUTYL KETONE

mf: $\text{C}_{13}\text{H}_{16}\text{O}$ mw: 188.29

SYNS: BICYCLO(4.2.0)OCTA-1,3,5-TRIENE, 7-VALERYL- □ 1-BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL-1-PENTANONE □ KETONE, BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL BUTYL □ PENTANONE, 1-BENZOCYCLOBUTYL- □ 1-PENTANONE, 1-BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL-

TOXICITY DATA with REFERENCE:

ipr-mus LD50: 550 mg/kg JMCAR 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.

BCH900 CAS: 196-77-0 HR: D
BENZO(def)CYCLOPENTA(hi)CHRYSENE

mf: $\text{C}_{22}\text{H}_{12}$ mw: 276.34

SYNS: CYCLOPENTA(gj)BENZO(a)PYRENE □ INDENO(1,7-ab)PYRENE □ NAPHTHO(2,1,8-hij)ACEPHENANTHRYLENE

TOXICITY DATA with REFERENCE:

mic-bac-sat 100 $\mu\text{g}/\text{L}$ MUREAV 260,271,91

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BCI000 CAS: 198-46-9 HR: 2
BENZO(de)CYCLOPENT(a)ANTHRACENE

mf: $\text{C}_{20}\text{H}_{12}$ mw: 252.32

SYN: Δ^3 -DEHYDRO-3,4-TRIMETHYLENE-ISOBENZANTHRENE-2

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BCI250 CAS: 240-44-8 HR: 2
1H-BENZO(a)CYCLOPENT(b)ANTHRACENE

mf: $\text{C}_{21}\text{H}_{16}$ mw: 268.37

SYN: 6,7-CYCLOPENTENO-1,2-BENZANTHRACENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BCI265 CAS: 113779-16-1 HR: D
BENZO(l)CYCLOPENTA(cd)PYRENE

mf: $\text{C}_{22}\text{H}_{12}$ mw: 276.34

SYNS: CYCLOPENTABENZO(e)PYRENE □ NAPHTHO(1,2,3-mno)ACEPHENANTHRYLENE

TOXICITY DATA with REFERENCE:

mic-bac-sat 500 $\mu\text{g}/\text{L}$ MUREAV 260,271,91

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BCI300 CAS: 16327-90-5 HR: 2
2H-1,4-BENZODIAZEPIN-2-ONE, 7-CHLORO-1,3-DIHYDRO-3-HEMISUCCINYL-5-PHENYL, DIMETHYLAMINOETHANOL SALT

mf: $\text{C}_{23}\text{H}_{26}\text{ClN}_3\text{O}_6$ mw: 475.97

SYN: SAS 546

TOXICITY DATA with REFERENCE:

orl-rat LD50: >3 g/kg BSIBAC 43,1422,67

ipr-rat LD50: 592 mg/kg BSIBAC 43,1422,67

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic vapors of NO_x and Cl^- .

BCI500 CAS: 135-87-5 HR: 3
BENZODIOXANE HYDROCHLORIDE

mf: $\text{C}_{14}\text{H}_{19}\text{NO}_2\cdot\text{ClH}$ mw: 269.80

PROP: Solid. Mp: 232–236°.

SYNS: BENODAINA HYDROCHLORIDE □ 1-(1,4-BENZODIOXAN-2-YLMETHYL)PIPERIDINEHYDROCHLORIDE □ F 933 □ FOURNEAU 933 □ 2-PIPERIDINOMETHYL-1,4-BENZODIOXAN HYDROCHLORIDE □ 2-(1-PIPERIDYLMETHYL)-1,4-BENZODIOXAN HYDROCHLORIDE □ PIPEROXANE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-mus LD50: 502 mg/kg JAPMA8 48,409,59

ipr-mus LD50: 175 mg/kg JAPMA8 48,409,59

scu-mus LD50: 500 mg/kg THERAP 13,17,58

ivn-mus LD50: 26 mg/kg AIPTAK 105,221,56

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion and subcutaneous routes. Experimental reproductive effects. When heated to decomposition it emits very toxic fumes of NO_x and HCl .

BCI750 CAS: 325-23-5 HR: 3
1-(1,4-BENZODIOXAN-2-YLMETHYL-1-BENZYL)-HYDRAZINE TARTRATE

mf: $\text{C}_{16}\text{H}_{18}\text{N}_2\text{O}_2\cdot\text{C}_4\text{H}_4\text{O}_6$ mw: 418.44

TOXICITY DATA with REFERENCE:

scu-rat LD50: 700 mg/kg 27ZQAG -,317,72

orl-mus LD50: 250 mg/kg 27ZQAG -,317,72

scu-mus LD50: 225 mg/kg 27ZQAG -,317,72

scu-mky LD50: 200 mg/kg 27ZQAG -,317,72

scu-rbt LD50: 325 mg/kg 27ZQAG -,317,72

scu-gpg LD50: 350 mg/kg 27ZQAG -,317,72

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.

BCI800 CAS: 7797-83-3 HR: 3
1,3-BENZODIOXOLE-4-CARBOXALDEHYDE

mf: C₈H₆O₃ mw: 150.13

TOXICITY DATA with REFERENCE:

orl-rat TDLo:12.8 mg/kg BIPBU* 24,1277,2001

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BCJ000 CAS: 5208-87-7 HR: 3
1,3-BENZODIOXOLE-5-(2-PROPEN-1-OL)

mf: C₁₀H₁₀O₃ mw: 178.20

SYNS: 1'-HYDROXYSAFROLE □ 1,2-METHYLENEDIOXY-4-(1-HYDROXYALLYL)BENZENE □ α-VINYLPYPERONYL ALCOHOL

TOXICITY DATA with REFERENCE:

mma-sat 1 μmol/plate MUREAV 60,143,79

dnd-rat-ipr 100 mg/kg CNREA8 36,1686,76

oms-mus-ipr 400 μmol/kg CNREA8 41,2664,81

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCJ005 CAS: 22791-33-9 HR: 3
1,3-BENZODIOXOL-4-OL, 2,2-DIMETHYL-, ACETYLMETHYLCARBAMATE

mf: C₁₃H₁₅NO₅ mw: 265.29

SYNS: ACETYLMETHYLCARBAMIC ACID 2,2-DIMETHYL-1,3-BENZODIOXOL-4-YL ESTER □ CARBAMIC ACID, ACETYLMETHYL-, 2,2-DIMETHYL-1,3-BENZODIOXOL-4-YL ESTER □ CARBAMIC ACID, ACETYLMETHYL-, 2,3-(ISOPROPYLDENEDIOXY)PHENYL ESTER □ NC-6897, ACETYL DERIVATIVE

TOXICITY DATA with REFERENCE:

orl-rat LD50:>320 mg/kg PSSCBG 3,735,1972

orl-mus LD50:>300 mg/kg PSSCBG 3,735,1972

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x.

BCJ025 CAS: 40373-39-5 HR: 2
1,3-BENZODIOXOL-4-YL ACETYLMETHYLCARBAMATE

mf: C₁₁H₁₁NO₅ mw: 237.23

SYNS: ACETYLMETHYLCARBAMIC ACID 1,3-BENZODIOXOL-4-YL ESTER □ 1,3-BENZODIOXOL-4-OL, ACETYLMETHYLCARBAMATE □ 1,3-BENZODIOXOL-4-YL N-ACETYL-N-METHYL CARBAMATE □ CARBAMIC ACID, ACETYLMETHYL-, 1,3-BENZODIOXOL-4-YL ESTER

TOXICITY DATA with REFERENCE:

orl-rat LD50:>1 g/kg USXXAM #3948952

orl-mus LD50:>4 g/kg PSSCBG 3,735,72

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x.

BCJ090 CAS: 58344-21-1 HR: 2

3-(1,3-BENZODIOXOL-5-YL)-1-(1,1-DIMETHYLETHYL)-2-PROPENYLTETRA DECAHOIC ACID ESTER

mf: C₂₈H₄₄O₄ mw: 444.72

SYNS: D 442 □ TETRADECANOATE de ((METHYLENEDIOXY-3,4 PHENYL)-1 DIMETHYL-4,4 PENTENE-1)YLE-3

TOXICITY DATA with REFERENCE:

ipr-mus LD50:>1 g/kg FRXXBL #2253504

SAFETY PROFILE: Moderately toxic by intraperitoneal route. When heated to decomposition it emits acrid smoke and irritating vapors.

BCJ100 CAS: 22791-23-7 HR: 3
1,3-BENZODIOXOL-4-YL METHYLCARBAMATE

mf: C₉H₉NO₄ mw: 195.19

SYNS: 1,3-BENZODIOXOL-4-OL, METHYLCARBAMATE □ CARBAMIC ACID, METHYL-, 2,3-(METHYLENEDIOXY)PHENYL ESTER □ PHENOL, 2,3-(METHYLENEDIOXY)-, METHYLCARBAMATE

TOXICITY DATA with REFERENCE:

orl-rat LD50:>94 mg/kg PSSCBG 3,735,1972

orl-mus LD50:125 mg/kg PSSCBG 3,735,1972

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x.

BCJ125 CAS: 32283-21-9 HR: 3
1,3-BENZODITHOLIUM PERCHLORATE

mf: C₇H₅ClO₄S₂ mw: 252.69

SAFETY PROFILE: A friction and heat-sensitive explosive. Upon decomposition it emits toxic fumes of Cl⁻ and SO_x. See also PERCHLORATES.

BCJ150 CAS: 54531-52-1 HR: 3
BENZODOL

mf: (C₆H₇AsO₄•CH₂O)_n

PROP: Sol in water, alc, and NaOH.

SYNS: ARSONIC ACID, (4-HYDROXYPHENYL)-, polymer with FORMALDEHYDE □ (4-HYDROXYPHENYL)ARSONIC ACID polymer with FORMALDEHYDE □ POLYBENZARSOL

TOXICITY DATA with REFERENCE:

orl-mus LD50:>4 g/kg ANTCAO 8,400,58

ipr-mus LD50:235 mg/kg MEIEDD 11,1203,89

OSHA PEL: TWA 0.5 mg(As)/m³

ACGIH TLV: BEI: 35 μ(As)/L inorganic arsenic and methylated metabolites in urine

SAFETY PROFILE: Poison by intraperitoneal route. Low toxicity by ingestion. When heated to decomposition it emits toxic fumes of As.

BCJ200 CAS: 203-12-3 HR: 2
2,13-BENZOFLUORANTHENE

mf: C₁₈H₁₀ mw: 226.28

PROP: Yellow crystals. Mp: 149°. Insol in water.

SYNS: BENZO(ghi)FLUORANTHENE □

BENZO(mno)FLUORANTHENE □ 7,10-BENZOFLUORANTHENE

TOXICITY DATA with REFERENCE:

mma-sat 10 μg/plate MUREAV 174,247,86

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Human No Adequate Data IMEMDT 32,171,83; Animal Inadequate Evidence IMEMDT 32,171,83. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mutation data reported. Questionable carcinogen. When heated to decomposition it emits acrid smoke and irritating vapors.

BCJ250 CAS: 205-82-3 HR: 3
BENZO(j)FLUORANTHENE

mf: C₂₀H₁₂ mw: 252.32

PROP: Yellow crystals from EtOH. Mp: 165°, bp: 240–260° @ 2 mm.

SYNS: 10,11-BENZFLUORANTHENE □ BENZ(j)FLUOROANTHRENE □ BENZO(1)FLUORANTHENE □ 7,8-BENZOFUORANTHENE □ B(j)F □ DIBENZO(a,j,k)FLUORENE

TOXICITY DATA with REFERENCE:

mma-sat 10 µg/plate CNREA8 40,4258,80

dnd-mus-skn 3760 nmol/kg PAACA3 25,121,84

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 2B IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 3,82,73; Animal Sufficient Evidence IMEMDT 32,155,83.

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCJ280 CAS: 207-08-9 HR: 3
BENZO(k)FLUORANTHENE

mf: C₂₀H₁₂ mw: 252.32

PROP: Yellow prisms from C₆H₆ or AcOH. Mp: 217°, bp: 480°.

SYNS: 8,9-BENZOFUORANTHENE □ 11,12-BENZOFUORANTHENE □ 11,12-BENZO(k)FLUORANTHENE □ 2,3,1',8'-BINAPHTHYLENE □ DIBENZO(b,j,k)FLUORENE

TOXICITY DATA with REFERENCE:

mma-sat 10 µg/plate CNREA8 40,4528,80

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 2B IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 32,163,83; Human No Adequate Data IMEMDT 32,163,83.

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Polynuclear Aromatic Hydrocarbons (HPLC), 5506; (GC), 5515.

BCJ300 CAS: 30777-19-6 HR: D
BENZO(b)FLUORENE

mf: C₁₇H₁₂ mw: 216.29

TOXICITY DATA with REFERENCE:

mno-sat 25 µmol/L/2H CNREA8 39,4152,79

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BCJ800 CAS: 243-17-4 HR: 2
2,3-BENZOFUORENE

mf: C₁₇H₁₂ mw: 216.29

SYN: 11H-BENZO(b)FLUORENE

TOXICITY DATA with REFERENCE:

mma-sat 15 µg/plate MUREAV 174,247,86

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Inadequate Evidence IMEMDT 32,183,83; Human No Adequate Data IMEMDT 32,183,83. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mutation data reported. Questionable carcinogen. When heated to decomposition it emits acrid smoke and irritating vapors.

BCJ900 CAS: 205-12-9 HR: 2
7H-BENZO(c)FLUORENE

mf: C₁₇H₁₂ mw: 216.29

SYN: 3,4-BENZOFUORENE

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Human No Adequate Data IMEMDT 32,189,83; Animal Inadequate Evidence IMEMDT 32,189,83.

SAFETY PROFILE: Questionable carcinogen. When heated to decomposition it emits acrid smoke and irritating vapors.

BCK250 CAS: 271-89-6 HR: 2
BENZOFURAN

mf: C₈H₆O mw: 118.14

PROP: Liquid. D: 1.078° @ 15°/15°, bp: 166.5–168° @ 735 mm.

SYNS: BENZO(b)FURAN □ 2,3-BENZOFURAN □ BENZOFURFURAN □ COUMARONE □ NCI-C56166 □ 1-OXINDENE

TOXICITY DATA with REFERENCE:

msc-mus:lym 100 mg/L EMMUEG 11,91,88

sce-ham:ovr 199 mg/L NTPTR* NTP-TR-370,89

ipr-mus LD50:500 mg/kg EJMCA5 12,383,77

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. NTP Carcinogenesis Studies (gavage): Clear Evidence: mouse NTPTR* NTP-TR-370,89; (gavage): Some Evidence: rat NTPTR* NTP-TR-370,89. EPA TSCA Chemical Inventory.

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic data reported. Moderately toxic by intraperitoneal route. Mutation data reported. When heated to decomposition it emits acrid smoke and fumes.

BCK750 CAS: 5149-69-9 HR: 3
2-BENZO-FURANCETONITRILE

SYNS: 2-CYANOCETYLCOMARONE □ USAF KF-4

TOXICITY DATA with REFERENCE:

orl-rat LDLo:3200 mg/kg KODAK* -,71

ipr-rat LDLo:800 mg/kg KODAK* -,71

ipr-mus LD50:100 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: Cyanide and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. See also NITRILES. When heated to decomposition it emits toxic fumes of CN⁻ and NO_x.

BCK800 CAS: 42242-59-1 HR: 2
p-(5-BENZOFURYLAZO)-N,N-DIMETHYL-ANILINE

mf: C₁₆H₁₅N₃O mw: 265.34

SYNS: ANILINE, p-(5-BENZOFURYLAZO)-N,N-DIMETHYL- □ N,N-DIMETHYL-p-(5-BENZOFURYLAZO)ANILINE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data reported. When heated to decomposition it emits toxic vapors of NO_x.

BCL100 CAS: 42242-58-0 HR: 2
p-(7-BENZOFURYLAZO)-N,N-DIMETHYL-ANILINE

mf: C₁₆H₁₅N₃O mw: 265.34

SYNS: ANILINE, p-(7-BENZOFURYLAZO)-N,N-DIMETHYL- □ N,N-DIMETHYL-p-(7-BENZOFURYLAZO)ANILINE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x.

BCL250 CAS: 23844-24-8 HR: 3
BENZOGUANAMINE

mf: C₂₂H₃₂N₂O₅ mw: 404.56

PROP: Crystals. Mp: 227°, d: 1.4.

SYNS: 2-ACETOXY-3-DIETHYLCARBAMYL-9,10-DIMETHOXY-1,2,3,4,6,7-HEXAHYDRO-11B-BENZO(a)QUINOLIZINE □ BENZOCHINAMIDE □ BENZOQUINAMIDE □ BENZQUINAMIDE □ BENZQUINAMIDU (POLISH) □ BZQ □ P 2647 □ QUANTRIL □ QUANTRYL

TOXICITY DATA with REFERENCE:

orl-rat LD50:1050 mg/kg 27ZQAG -,208,72
ivn-rat LD50:100 µg/kg 27ZQAG -,208,72
orl-mus LD50:580 mg/kg 27ZQAG -,208,72
ipr-mus LD50:321 mg/kg DIPHAH 17,145,65
ivn-mus LD50:100 mg/kg 27ZQAG -,208,72
orl-bwd LD50:100 mg/kg TXAPA9 21,315,72

SAFETY PROFILE: Poison by ingestion, intraperitoneal, and intravenous routes. When heated to decomposition it emits toxic fumes of NO_x.

BCL500 CAS: 495-18-1 HR: 2
BENZOHYDROXAMIC ACID

mf: C₇H₇NO₂ mw: 137.15

PROP: Rhombic tablets. Mp: 128°.

SYNS: BENZOHYDROXAMATE □ BENZOYLHYDROXAMIC ACID □ N-HYDROXYBENZAMIDE □ PHENYLHYDROXAMIC ACID

TOXICITY DATA with REFERENCE:

mimo-sat 2500 nmol/plate MUREAV 135,139,84
mma-sat 1 µmol/plate MUREAV 56,7,77
orl-rat LD:>500 mg/kg NCNSA6 5,26,53

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

SAFETY PROFILE: Moderately toxic by ingestion. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BCL750 CAS: 65-85-0 HR: 2
BENZOIC ACID

mf: C₇H₆O₂ mw: 122.13

PROP: White crystalline powder, leaflets, or needles from water. Mp: 122°, bp: 249°, flash p: 250°F (CC), d: 1.316, autoign temp: 1060°F, vap press: 1 mm @ 96.0° (sublimes), vap d: 4.21. Very sltly sol in water; sol in alc, ether, chloroform, and fixed oils.

SYNS: ACIDE BENZOIQUE (FRENCH) □ BENZENE-CARBOXYLIC ACID □ BENZENEFORMIC ACID □ BENZENEMETHANOIC ACID □ BENZOATE □ BENZOESAEURE (GERMAN) □ BENZOIC ACID (DOT) □ CARBOXYBENZENE □ DRACYLIC ACID □ KYSELINA BENZOOVA (CZECH) □ PHENYL CARBOXYLIC ACID □ PHENYLFORMIC ACID □ RETARDER BA □ RETARDEX □ SALVO LIQUID □ SALVO POWDER □ TENN-PLAS

TOXICITY DATA with REFERENCE:

skn-hmn 22 mg/3D-I MOD 85DKA8 -,127,77
skn-rbt 500 mg/24H MLD BIOFX* 28-4/73
eye-rbt 100 mg SEV BIOFX* 28-4/73
mmo-esc 10 mmol/L ZBPIA9 112,226,59
dni-hmn:lym 5 mmol/L PNASA6 79,117,82
orl-man LDLo:500 mg/kg FCTXAV 17,715,79
orl-rat LD50:1700 mg/kg IPSTB3 3,93,76
orl-mus LD50:1940 mg/kg IYKEDH 15,359,84
ipr-mus LD50:1460 mg/kg CRSBAW 160,1097,66
orl-dog LD50:2000 mg/kg 27ZTAP 3,22,69
orl-cat LD50:2000 mg/kg 27ZTAP 3,22,69
orl-rbt LDLo:2000 mg/kg HBTXAC 5,23,59
scu-rbt LDLo:2000 mg/kg HBTXAC 5,23,59
orl-gpg LDLo:2 g/kg MMWAOA 77,13,30
ipr-gpg LDLo:1400 mg/kg HBTXAC 5,23,59
scu-frg LDLo:100 mg/kg HBTXAC 5,23,59

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

SAFETY PROFILE: Moderately toxic by ingestion, subcutaneous, and intraperitoneal routes. A severe eye irritant. A human skin and severe eye irritant. Mutation data reported. Combustible when exposed to heat or flame; can react with oxidizing materials. The powder burns rapidly in oxygen. To fight fire, use water, CO₂, water spray or mist, dry chemical. When heated to decomposition it emits acrid smoke and irritating fumes.

BCM000 CAS: 120-51-4 HR: 2
BENZOIC ACID, BENZYL ESTER

mf: C₁₄H₁₂O₂ mw: 212.26

PROP: Leaflets found in Peru and tolu balsams, in ylang-ylang, and in about 20 other essential oils (FCTXAV 11,1011,73). Colorless oily liquid; slt aromatic odor. Mp. 21°, bp: 324°, flash p: 298°F (CC), d: 1.116, refr index: 1.568, vap d: 7.3, autoign temp: 898°F. Misc with alc, chloroform, ether; insol in glycerin, water.

SYNS: ASCABIN □ ASCABIOL □ BENYLATE □ BENZOIC ACID, PHENYLMETHYL ESTER □ BENZYL ALCOHOL BENZOIC ESTER □ BENZYL BENZENECARBOXYLATE □ BENZYL BENZOATE (FCC) □ BENZYLETS □ BENZYL PHENYLFORMATE □ COLEBENZ □ FEMA No. 2138 □ NOVOSCABIN □ PERUSCABIN □ SCABANCA □ VANZOATE □ VENZONATE

TOXICITY DATA with REFERENCE:

orl-rat LD50:1700 mg/kg JPETAB 93,26,48
skn-rat LD50:4 g/kg JPETAB 93,26,48
orl-mus LD50:1400 mg/kg JPETAB 93,26,48
orl-cat LD50:2240 mg/kg JPETAB 84,358,45
orl-rbt LD50:1680 mg/kg FCTXAV 11,1015,73
skn-rbt LD50:4000 mg/kg FCTXAV 11,1015,73
orl-gpg LD50:1000 mg/kg JPETAB 93,26,48

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. Combustible liquid. Can react with oxidizing materials. To fight fire, use CO₂, water spray or mist, dry chemical. When heated to decomposition it emits acrid and irritating fumes and smoke. See also ESTERS.

BCM250 CAS: 1696-17-9 HR: 2
BENZOIC ACID-N,N-DIETHYLAMIDE

mf: C₁₁H₁₅NO mw: 177.27

PROP: Bp: 280–282°.

SYNS: BENZOIC ACID DIETHYLAMIDE □

BENZOYLDIETHYLAMINE □ N,N-DIETHYLBENZAMIDE □ R 2 □ REBEMID □ REP

TOXICITY DATA with REFERENCE:

orl-rat LD50:2000 mg/kg FMCHA2 -,D219,80

orl-mus LD50:780 mg/kg MPPBAB 47,77,78

ihl-mus LC50:142 g/m³ MPPBAB 47,77,78

skn-mus LD50:1700 mg/kg MPPBAB 47,77,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. When heated to decomposition it emits toxic fumes of NO_x.

BCP000 CAS: 67011-39-6 HR: 1
BENZOIC-3-CHLORO-N-ETHOXY-2,6-DIMETHOXYBENZIMIDIC ANHYDRIDE

mf: C₁₈H₁₈ClNO₅ mw: 363.82

SYNS: BENZOMATE □ BENZOXAMATE □ CITRAZON □ ETHYL-*o*-BENZOYL-3-CHLORO-2,6-DIMETHOXY-BENZOHYDROXIMATE □ NA-53

TOXICITY DATA with REFERENCE:

orl-rat LD50:15,000 mg/kg 85ARAE 1,92,77

ipr-rat LD50:4217 mg/kg NYKGA7 3,123,76

orl-mus LD50:12 g/kg SPEADM 78-1,23,78

ipr-mus LD50:4264 mg/kg NYKGA7 3,123,76

SAFETY PROFILE: Mildly toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BCP250 CAS: 119-53-9 HR: 3
BENZOIN

mf: C₁₄H₁₂O₂ mw: 212.26

PROP: Externally reddish yellow, internally milky white tree resin with agreeable vanilla-like odor.

SYNS: ACETOPHENONE, 2-HYDROXY-2-PHENYL- □ BENZOYLPHENYL CARBINOL □ BITTER ALMOND OIL CAMPHOR □ ETHANONE, 2-HYDROXY-1,2-DIPHENYL- □ FENYL-*α*-HYDROXYBENZYLKETON □ *α*-HYDROXYBENZYL PHENYL KETONE □ *α*-HYDROXY-*α*-PHENYLACETO-PHEN-ONE □ 2-HYDROXY-2-PHENYLACETOPHENONE □ KETONE, *α*-HYDROXYBENZYL PHENYL □ NCI-C50011 □ WY-42956

TOXICITY DATA with REFERENCE:

mmo-sat 750 µg/plate PMRSDJ 5,187,85

mma-smc 25 mg/L PMRSDJ 5,247,85

dns-rat:lvrl 1 mmol/L PMRSDJ 5,371,85

msc-mus:lym 62,500 µg/L PMRSDJ 5,587,85

orl-rat LD50:10 g/kg FCTXAV 11,871,73

skn-rbt LD50:8870 mg/kg FCTXAV 11,871,73

CONSENSUS REPORTS: NCI Carcinogenesis Bioassay (feed); No Evidence: mouse, rat NCITR* NCI-CG-TR-204,80. Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Slightly toxic by ingestion and skin contact. Mutation data reported. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating fumes. See also KETONES.

BCP500 CAS: 441-38-3 HR: 3
α-BENZOIN OXIME

mf: C₁₄H₁₃NO₂ mw: 227.28

SYNS: BENZOINOXIM (CZECH) □ CUPRON (CZECH) □ CUPRONE □ *α*-OXIME BENZOIN □ USAF FA-5

TOXICITY DATA with REFERENCE:

eye-rbt 500 mg/24H MLD 28ZPAK -,111,72

orl-rat LD:[>]500 mg/kg NCNSA6 5,9,53

ipr-mus LD50:150 mg/kg NTIS** AD691-490

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal route. Mildly toxic by ingestion. An eye irritant. When heated to decomposition it emits toxic fumes of NO_x.

BCP530 CAS: 129286-36-8 HR: 2
BENZO(j)FLUORANTHENE, 4-FLUORO-

mf: C₂₀H₁₁F mw: 270.31

SYN: 4-FLUOROBENZO(j)FLUORANTHENE

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data reported. When heated to decomposition it emits toxic vapors of F⁻.

BCP650 CAS: 53-89-4 HR: 3
BENZOMETAN

mf: C₂₂H₂₅N₃O mw: 347.50

PROP: Crystals from ethanol. Mp: 181–183° (decomp).

SYNS: BENZOPIPERILONE (ITALIAN) □ BENZPIPERILONE □ BENZPIPERYLON □ 4-BENZYL-1-(1-METHYL-4-PIPERIDYL)-3-PHENYL-3-PYRAZOLIN-5-ONE □ 1,2-DIHYDRO-2-(1-METHYL-4-PIPERIDINYL)-5-PHENYL-4-(PHENYLMETHYL)-3H-PYRAZOL-3-ONE (9CI) □ HUMEDIL □ KB 95 □ 1-(N-METIL-PIPERIDIL-4')-3-FENIL-4-BENZIL-PIRAZOLONE-5 (ITALIAN) □ PPBP □ REUBLONIL □ TELON

TOXICITY DATA with REFERENCE:

orl-rat LD50:2700 mg/kg BCFAAI 102,602,63

ivn-rat LD50:160 mg/kg BCFAAI 102,602,63

orl-mus LD50:1880 mg/kg BCFAAI 102,602,63

scu-mus LD50:615 mg/kg BCFAAI 102,602,63

ivn-mus LD50:160 mg/kg BCFAAI 102,602,63

orl-rbt LD50:1700 mg/kg BCFAAI 102,602,63

ivn-rbt LD50:83 mg/kg BCFAAI 102,602,63

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.

BCP685 CAS: 3811-10-7 HR: 3
BENZOMETHAMINE BROMIDE

mf: C₂₂H₃₁N₂O₂•Br mw: 435.46

SYNS: N,N-DIETHYL-2-((HYDROXYDIPHENYLACETYL)-METHYLAMINO)-N-METHYL-ETHANAMINIUM BROMIDE (9CI)

□ DIETHYLMETHYL(2-(N-METHYLBENZILAMIDO)ETHYL)-
AMMONIUM BROMIDE □ MC 3199

TOXICITY DATA with REFERENCE:

orl-mus LD50:2700 mg/kg JPETAB 114,54,55

ipr-mus LD50:136 mg/kg JPETAB 114,54,55

ivn-mus LD50:31,800 µg/kg JPETAB 114,54,55

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion.

When heated to decomposition it emits toxic fumes of Br⁻ and NO_x.

BCP690 CAS: 190133-94-9 HR: 3
**5H-BENZO(d)NAPHTH(2,1-B)AZEPIN-12-OL, 11-
CHLORO-6,6A,7,8,9,13b-HEXAHYDRO-7-
METHYL-, HYDROCHLORIDE, (6as,13br)-**

mf: C₁₉H₂₀ClNO•ClH mw: 350.29

SYN: (-)-SCH 39166 HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

ims-mky TDLo:0.3 mg/kg JPETAB 293,1017,2000

SAFETY PROFILE: A poison by intramuscular route.

When heated to decomposition it emits toxic vapors of NO_x, HCl, and Cl⁻.

BCP750 CAS: 192-70-1 HR: 2
BENZO(a)NAPHTHO(8,1,2-cde)NAPHTHACENE
mf: C₂₈H₁₆ mw: 352.44

PROP: Yellow needles from xylene. Mp: 262–263°.

SYN: NAPHTO(1,2-c-d-e)NAPHTHACENE (FRENCH)

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BCQ000 CAS: 196-79-2 HR: 2
BENZO(h)NAPHTHO(1,2-f,s-3)QUINOLINE
mf: C₂₁H₁₃N mw: 279.35

PROP: Crystals from toluene. Mp: 127–128°.

SYN: PYRIDO(3',2':5,6)CHRYSENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BCQ250 CAS: 100-47-0 HR: 3
BENZONITRILE
DOT: UN 2224

mf: C₇H₅N mw: 103.13

PROP: Transparent, colorless oil; almond-like odor. D: 1.246 @ 20°/4°, bp: 191°, mp: -12.8°.

SYNS: BENZENENITRILE □ BENZOIC ACID NITRILE □ BENZONITRILE (DOT) □ CYANOBENZENE □ FENYLKYANID □ PHENYL CYANIDE

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MOD FCTXAV 17(Suppl),695,79

orl-rat LDLo:720 mg/kg AMRL** TR-74-78,74

ihl-rat LCLo:950 ppm/8H AMRL** TR-74-78,74

skn-rat LD50:1200 mg/kg AMRL** TR-74-78,74

orl-mus LD50:971 mg/kg NEZAAQ 39,423,84

ihl-mus LC50:6000 mg/m³ AZMZA6 52(11),60,75

scu-mus LD50:180 mg/kg MEIEDD 10,156,83

scu-rbt LDLo:200 mg/kg AIPTAK 5,161,1899

scu-frg LDLo:1700 mg/kg AIPTAK 5,161,1899

ipr-rat LD50:740 mg/kg APFRAD 48,23,90

orl-mus LD50:971 mg/kg NEZAAQ 39,423,84

ipr-mus LD50:400 mg/kg FCTXAV 17,723,79

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Cyanide and its compounds are on the Community Right-To-Know List.

DOT CLASSIFICATION: 6.1; Label: Poison

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. Moderately toxic by ingestion, inhalation, and skin contact. See also NITRILES. A skin irritant. Combustible liquid. When heated to decomposition it emits toxic fumes of CN⁻ and NO_x.

BCQ500 CAS: 189-55-9 HR: 3
BENZO(rst)PENTAPHENE
mf: C₂₄H₁₄ mw: 302.38

PROP: Green-yellow needles from toluene. Mp:

280–282°, bp: 275° @ 0.05 mm (subl).

SYNS: DB(a,i)P □ DIBENZO(a,i)PYRENE □ DIBENZO(b,h)-PYRENE □ 1,2,7,8-DIBENZOPYRENE □ 3,4,9,10-DIBENZO-PYRENE □ DIBENZ(a,i)PYRENE □ 1,2,7,8-DIBENZPYRENE □ 3,4,9,10-DIBENZPYRENE □ RCRA WASTE NUMBER U064

TOXICITY DATA with REFERENCE:

mma-sat 20 µg/plate PNASA6 72,5135,75

mrc-esc 600 µg/well MUREAV 46,53,77

dnd-esc 10 µmol/L MUREAV 89,95,81

otr-ham:kdy 80 µg/L BJCAAI 37,873,78

msc-ham:lng 30 µg/L CNREA8 42,1646,82

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 2B IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 3,215,73; IMEMDT 32,337,83. EPA Genetic Toxicology Program.

SAFETY PROFILE: Confirmed carcinogen with experimental neoplastigenic and tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCQ750 CAS: 63040-53-9 HR: 2
**BENZO(rst)PENTAPHENE-5-
CARBOXALDEHYDE**

mf: C₂₅H₁₄O mw: 330.39

SYN: 5-FORMYL-3,4,9,10-DIBENZOPYRENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BCQ800 CAS: 191-85-5 HR: D
BENZO(a)PERYLENE
mf: C₂₄H₁₄ mw: 302.38

SYN: 1,2-BENZOPERYLENE

TOXICITY DATA with REFERENCE:

msc-hmn-lym 3 µg/ MUREAV 446,1,1999

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BCQ810 CAS: 197-70-6 HR: D
BENZO(b)PERYLENE
mf: C₂₄H₁₄ mw: 302.38

SYNS: 2,3-BENZOPERYLENE □ DIBENZO(de,op)NAPHTHACENE

TOXICITY DATA with REFERENCE:

msc-hmn-lym 100 µg/ MUREAV 446,1,199

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BCR000 CAS: 191-24-2 HR: 2
BENZO(ghi)PERYLENE

mf: C₂₂H₁₂ mw: 276.34

PROP: Yellowish-green fluorescent leaflets from C₆H₆.
 Mp: 272–273°.

SYNS: 1,12-BENZPERYLENE □ 1,12-BENZOPERYLENE

TOXICITY DATA with REFERENCE:

mma-sat 2 µg/plate/48H FCTXAV 17,141,79

CONSENSUS REPORTS: IARC Cancer Review:
 Group 3 IMEMDT 7,56,87, Animal Inadequate Evidence
 IMEMDT 32,195,83. EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen.
 Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Polynuclear Aromatic Hydrocarbons (HPLC), 5506; (GC), 5515.

BCR250 CAS: 190-07-8 HR: 2
BENZO(a)PHENALENO(1,9-h,i)ACRIDINE

mf: C₂₇H₁₅N mw: 353.43

SYN: BENZO(c)PHENALENO(1,9-i,j)ACRIDINE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BCR500 CAS: 190-03-4 HR: 2
BENZO(a)PHENALENO(1,9-i,j)ACRIDINE

mf: C₂₇H₁₅N mw: 353.43

SYN: BENZO(h)PHENALENO(1,9-bc)ACRIDINE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x.

BCR750 CAS: 195-19-7 HR: 2
BENZO(c)PHENANTHRENE

mf: C₁₈H₁₂ mw: 228.30

PROP: Needles from EtOH or pet ether. Mp: 68°.

SYNS: 3,4-BENZOPHENANTHRENE □ 3,4-BENZ
 PHENANTHRENE □ TETRAHELICENE

TOXICITY DATA with REFERENCE:

mma-sat 25 nmol/plate CNREA8 40,287,80

CONSENSUS REPORTS: IARC Cancer Review:
 Group 3 IMEMDT 7,56,87, Animal Inadequate Evidence
 IMEMDT 32,205,83.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid and irritating fumes.

BCS000 CAS: 4466-76-6 HR: 2
**BENZO(c)PHENANTHRENE-8-CARBOX-
 ALDEHYDE**

mf: C₁₉H₁₂O mw: 256.31

SYN: 2-FORMYL-3:4-BENZPHENANTHRENE

SAFETY PROFILE: Questionable carcinogen with tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BCS100 HR: 2
**(±)-BENZO(c)PHENANTHRENE-3,4-
 DIHYDRODIOL**

mf: C₁₈H₁₄O₂ mw: 262.32

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic and irritating fumes.

BCS103 HR: 2
**(+)-BENZO(c)PHENANTHRENE-3,4-DIOL-1,2-
 EPOXIDE-1**

mf: C₁₈H₁₄O₃ mw: 278.32

SYNS: BENZO(c)PHENANTHRENE-3,4-DIOL, 1,2,3,4-
 TETRAHYDRO-1,2-EPOXY-, (Z)-(+)-(1R,2S,3R,4S)- □ cis-1-β,2-β-
 EPOXY-1,2,3,4-TETRAHYDROBENZO(c)PHENANTHRENE-3-α-
 4-β-DIOL

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic and irritating fumes.

BCS105 HR: 2
**(+)-BENZO(c)PHENANTHRENE-3,4-DIOL-1,2-
 EPOXIDE-2**

mf: C₁₈H₁₄O₃ mw: 278.32

SYNS: BENZO(c)PHENANTHRENE-3,4-DIOL, 1,2,3,4-
 TETRAHYDRO-1,2-EPOXY-1, (E)-(+)-(1S,2R,3R,4S)- □ trans-1-α-2-
 α-EPOXY-1,2,3,4-TETRAHYDROBENZO(c)PHENANTHRENE-3-
 α,4-β-DIOL

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic and irritating fumes.

BCS110 HR: 2
**(-)-BENZO(c)PHENANTHRENE-3,4-DIOL-1,2-
 EPOXIDE-2**

mf: C₁₈H₁₄O₃ mw: 278.32

SYNS: BENZO(c)PHENANTHRENE-3,4-DIOL, 1,2,3,4-TETRA
 HYDRO-1,2-EPOXY-, (E)-(-)-(1R,2S,3S,4R)- □ trans-1-β,2-β-EPOXY-
 1,2,3,4-TETRAHYDROBENZO(c)PHENANTHRENE-3-β, 4-α-DIOL

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic and irritating fumes.

BCS100 CAS: 18636-88-9 HR: 1
BENZO(a)PHENAZINE DI-N-OXIDE

mf: C₁₆H₁₀H₁₀N₂O₂ mw: 272.38

SYN: BENZO(a)PHENAZINE, 7,12-DIOXIDE

TOXICITY DATA with REFERENCE:

orl-rat LD50:4617 mg/kg ATDAEI 15(Suppl 1),S85,1996

SAFETY PROFILE: Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of NO_x.

BCS250 CAS: 119-61-9 HR: 3
BENZOPHENONE

mf: C₁₃H₁₀O mw: 182.23

PROP: Rhombic prisms (stable form), monoclinic prisms (labile form), white crystals; persistent rose-like odor. Mp (α): 49°, mp (β): 26°, mp (γ): 47°, bp: 305.4°, d (α): 1.0976

@ 50°/50°, d (β): 1.108 @ 23°/40°, vap press: 1 mm @ 108.2. Sol in fixed oils; sltly sol in propylene glycol; insol in glycerin.

SYNS: BENZOYLBENZENE □ DIPHENYL KETONE □ DIPHENYLMETHANONE □ FEMA No. 2134 □ α-OXODIPHENYL METHANE □ PHENYL KETONE

TOXICITY DATA with REFERENCE:

orl-mus LD50:2895 mg/kg JETOAS 9,99,76

ipr-mus LD50:727 mg/kg JETOAS 9,99,76

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. Combustible when heated.

Incompatible with oxidizers. When heated to decomposition it emits acrid and irritating fumes. See also KETONES.

**BCS325 CAS: 131-55-5 HR: 2
BENZOPHENONE-2**

mf: C₁₃H₁₀O₅ mw: 246.23

PROP: Needles from H₂O. Mp: 196–198°.

SYNS: 2,2',4,4'-TETRAHYDROXY BENZOPHENONE □ 2,4,2',4'-TETRAHYDROXYBENZOPHENONE □ THBP □ UVINOL D-50 □ UVINUL D-50

TOXICITY DATA with REFERENCE:

eye-rbt 100 mg MOD JACTDZ 2(5),35,83

mma-sat 100 µg/plate FCTOD7 20,427,82

cyt-mus:lym 200 µg/plate JACTDZ 2(5),35,83

orl-rat LD50:1220 mg/kg JACTDZ 2(5),35,83

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. An eye irritant. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

**BCS400 CAS: 574-66-3 HR: 2
BENZOPHENONE, OXIME**

mf: C₁₃H₁₁NO mw: 197.25

PROP: Mp: 144–146°.

SYNS: BENZOPHENOXIME □ DIPHENYL KETOXIME □ DIPHENYLMETHANONE OXIME □ (DIPHENYLMETHYLENE)-HYDROXYL-AMINE □ METHANONE, DIPHENYL-, OXIME (9CI)

TOXICITY DATA with REFERENCE:

unr-mus LD50:560 mg/kg PCJOAU 12,227,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by unspecified route. When heated to decomposition it emits toxic vapors of NO_x.

**BCS450 CAS: 64050-25-5 HR: 2
12H-BENZO(B)PHENOSELENIAZINE**

mf: C₁₆H₁₁NSe mw: 296.24

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:500 mg/kg NCNSA6 5,24,1953

ACGIH TLV: TWA 0.2 mg(Se)/m³

SAFETY PROFILE: Moderately toxic by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Se.

**BCS460 CAS: 189-96-8 HR: D
BENZO(PQR)PICENE**

mf: C₂₄H₁₄ mw: 302.38

SYN: NAPHTHO(2,1-A)PYRENE

TOXICITY DATA with REFERENCE:

msc-hmn-lym 5 µg/ MUREAV 371,123,1996

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

**BCS500 CAS: 51593-70-5 HR: 3
1-(2H-1-BENZOPYRAN-3-YL)ETHANONE**

mf: C₁₁H₁₀O₂ mw: 174.21

SYNS: 2H-1-BENZOPYRAN, 3-ACETYL- □ 2H-1-BENZOPYRAN-3-YL METHYL KETONE □ ETHANONE, 1-(2H-1-BENZOPYRAN-3-YL)-(9CI) □ KETONE, 2H-1-BENZOPYRAN-3-YL METHYL

TOXICITY DATA with REFERENCE:

ipr-mus LD50:1000 mg/kg EJMCA5 11,81,76

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.

**BCS550 CAS: 98151-92-9 HR: D
BENZO(a)PYREN-3-AMINE**

mf: C₂₀H₁₃N mw: 267.34

SYNS: 3-AMINOBENZO(a)PYRENE □ BENZO(a)PYRENE, 3-AMINO-

TOXICITY DATA with REFERENCE:

mic-sat 100 ng/plate CRNGDP 6,1235,1985

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.

**BCS750 CAS: 50-32-8 HR: 3
BENZO(a)PYRENE**

mf: C₂₀H₁₂ mw: 252.32

PROP: Pale-yellow crystals. Mp: 177°, bp: 312° @ 10 mm. Insol in water; sol in benzene, toluene, and xylene.

SYNS: BENZO(d,e,f)CHRYSENE □ 3,4-BENZOPIRENE (ITALIAN) □ 3,4-BENZOPYRENE □ 6,7-BENZOPYRENE □ BENZ(a)PYRENE □ 3,4-BENZOPYREN (GERMAN) □ 3,4-BENZ(a)PYRENE □ 3,4-BENZOPYRENE □ B(a)P □ RCRA WASTE NUMBER U022

TOXICITY DATA with REFERENCE:

skn-mus 14 µg MLD CALEDQ 4,333,78

dnd-sal:spr 3 g/L BIPMAA 5,477,67

dnd-hmn:oth 1500 nmol/L TCMUD8 1,3,80

msc-hmn:oth 100 nmol/L CRNGDP 1,765,80

scu-rat LD50:50 mg/kg ZEKBAI 69,103,67

ipr-mus LDLo:500 mg/kg TXAPA9 23,288,72

irn-frg LDLo:9 mg/kg CNREA8 24,1969,64

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 2A IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 32,211,83; IMEMDT 3,91,73. Reported in EPA TSCA Inventory.

OSHA PEL: TWA 0.2 mg/m³

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. A poison via subcutaneous, intraperitoneal, and intrarenal routes. Experimental teratogenic and reproductive effects. Human mutation

data reported. A skin irritant. A common air contaminant of water, food, and smoke. When heated to decomposition it emits acrid smoke and fumes. See other benzopyrenes.

ANALYTICAL METHOD: For occupational chemical analysis use OSHA: #ID-58 or NIOSH: Polynuclear Aromatic Hydrocarbons (HPLC), 5506; (GC), 5515.

**BCT000 CAS: 192-97-2 HR: 2
BENZO(e)PYRENE**

mf: $C_{20}H_{12}$ mw: 252.32

PROP: Prisms from C_6H_6 . Mp: 178–179°, bp: 250° @ 3–4 mm (subl).

SYNS: 1,2-BENZOPYRENE □ 4,5-BENZOPYRENE □ 1,2-BENZPYRENE □ B(e)P

TOXICITY DATA with REFERENCE:

mno-sat 1 nmol/plate CNREA8 40,1985,80

mma-sat 1 µg/plate ENMUDM 6(Suppl 2),1,84

msc-hmn:oth 12 µmol/L MUREAV 130,127,84

dns-rat:lv 79 nmol/L CNREA8 42,3010,82

dnd-mus-skn 192 µmol/kg CRNGDP 5,231,84

otr-ham:kdy 25 µg/L TOLED5 7,143,80

CONSENSUS REPORTS: IARC Cancer Review:

Group 3 IMEMDT 7,56,87; Animal Inadequate Evidence

IMEMDT 32,225,83; Animal Limited Evidence

IMEMDT 3,137,73. EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Experimental teratogenic and reproductive effects. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Polynuclear Aromatic Hydrocarbons (HPLC), 5506; (GC), 5515.

**BCT250 CAS: 13312-42-0 HR: 2
BENZO(a)PYRENE-6-CARBOXYALDEHYDE**

mf: $C_{21}H_{12}O$ mw: 280.33

SYNS: 3,4-BENZPYRENE-5-ALDEHYDE □ 6-FORMYLBENZO(a)PYRENE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic and neoplastigenic data. When heated to decomposition it emits acrid smoke and fumes. See also ALDEHYDES.

**BCT500 CAS: 64048-70-0 HR: 2
BENZO(a)PYRENE-6-CARBOXYALDEHYDE
THIOSEMICARBAZONE**

mf: $C_{22}H_{15}N_3S$ mw: 353.46

SYN: 3,4-BENZPYRENE-5-ALDEHYDE THIOSEMICARBAZONE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of SO_x and NO_x . See also ALDEHYDES.

**BCT750 CAS: 13345-25-0 HR: 2
BENZO(a)PYRENE-7,8-DIHYDRODIOL**

mf: $O_2C_{20}H_{14}$ mw: 286.34

SYN: BP-7,8-DIHYDRODIOL

TOXICITY DATA with REFERENCE:

mma-sat 8 µmol/L CALEDQ 24,281,84

dnd-hmn:fbr 30 µmol/L CBINA8 41,155,82

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic and tumorigenic data. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

**BCU000 CAS: 60268-85-1 HR: 2
anti-BENZO(a)PYRENE-7,8-DIHYDRODIOL-9,10-
OXIDE**

mf: $C_{20}H_{14}O_3$ mw: 302.34

SYNS: BENZO(a)PYRENE-7,8-DIHYDRODIOL-9,10-EPOXIDE

(anti) □ BP-7,8-DIHYDRODIOL-9,10-EPOXIDE (anti) □ anti-BP-7,8-DIHYDRODIOL-9,10-OXIDE

TOXICITY DATA with REFERENCE:

dnd-hmn:lym 800 µg/L CRNGDP 3,1107,82

msc-ham:lng 100 µg/L IJCNW 24,203,79

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

**BCU250 CAS: 58917-67-2 HR: 1
BENZO(a)PYRENE DIOL EPOXIDE ANTI**

SYNS: anti(±)BENZO(a)PYRENE-DIOL-EPOXIDE □ anti-BPDE

□ anti-r-7,trans-8-DIHYDROXY-trans-9,10-OXY-7,8,9,10-

TETRAHYDROBENZO(a)PYRENE □ BPDE □ BP DIOL

EPOXIDE ANTI □ trans-7,8-DIHYDROXY-9,10-OXY-7,8,9,10-

TETRAHYDROBENZO(a)PYRENE

TOXICITY DATA with REFERENCE:

mno-sat 200 pmol/plate MUREAV 125,95,84

dnd-hmn:fbr 1 µmol/L ENMUDM 7,267,85

dns-hmn:fbr 1500 nmol/L BBACAQ 824,146,85

msc-hmn:fbr 200 nmol/L MUREAV 125,95,84

dnd-ham:ovr 1 mg/L MUREAV 129,365,84

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data reported. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

**BCU500 CAS: 3067-13-8 HR: 2
BENZO(a)PYRENE-1,6-DIONE**

mf: $C_{20}H_{10}O_2$ mw: 282.30

PROP: Yellow needles from AcOH. Mp: 295° (2° decomp).

SYNS: 1,6-BENZO(a)PYRENEDIONE □ BENZO(a)PYRENE-1,6-QUINONE □ PB-1,6-QUINONE

TOXICITY DATA with REFERENCE:

msc-ham:lng 2 mg/L CNREA8 36,3350,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

**BCU750 CAS: 3067-14-9 HR: 2
BENZO(a)PYRENE-3,6-DIONE**

mf: C₂₀H₁₀O₂ mw: 282.30

PROP: Red needles from AcOH. Mp: 291° (decomp).

SYNS: 3,6-BENZO(a)PYRENEDIONE □ BENZO(a)PYRENE-3,6-QUINONE □ BP-3,6-QUINONE

TOXICITY DATA with REFERENCE:

mma-sat 5 µg/plate ENMUDM 7,839,85

dnd-hmn:fbr 1 µmol/L TOLED5 28,37,85

msc-ham:lng 2 mg/L CNREA8 36,3350,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data by skin contact. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCV000 CAS: 3067-12-7 HR: 2
BENZO(a)PYRENE-6,12-DIONE

mf: C₂₀H₁₀O₂ mw: 282.30

PROP: Solid. Mp: 320–322°.

SYNS: 6,12-BENZO(a)PYRENEDIONE □ BENZO(a)PYRENE-6,12-QUINONE □ 6,12-BENZOPYRENE QUINONE □ BP-6,12-QUINONE

TOXICITY DATA with REFERENCE:

msc-ham:lng 4 mg/L CNREA8 36,3350,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCV125 CAS: 71382-50-8 HR: D
BENZO(a)PYRENE-4,5-IMINE

mf: C₂₀H₁₃N mw: 267.34

SYN: 3b,4a-DIHYDRO-4H-BENZO(1,2)PYRENO(4,5-b)AZIRINE

TOXICITY DATA with REFERENCE:

mimo-sat 100 ng/plate CNREA8 45,2600,85

mimo-esc 1 µg/plate CNREA8 45,2600,85

dnr-bcs 100 ng/plate CNREA8 45,2600,85

sce-hmn:fbr 10 nmol/L CNREA8 45,2600,85

msc-ham:lng 30 nmol/L CNREA8 45,2600,85

SAFETY PROFILE: Human mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BCV250 CAS: 21247-98-3 HR: 3
BENZO(a)PYRENE-6-METHANOL

mf: C₂₁H₁₄O mw: 282.35

PROP: Pale-yellow crystals from C₆H₆. Mp: 270–271°.

SYN: 6-HYDROXYMETHYLBENZO(a)PYRENE

TOXICITY DATA with REFERENCE:

dnd-omi 30 µmol/L CBINA8 31,51,80

dnd-mam:lym 500 mg/L CBINA8 25,35,79

bfa-rat/sat 1 mg/kg MUREAV 173,251,86

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and fumes.

BCV500 CAS: 37574-47-3 HR: 2
BENZO(a)PYRENE-4,5-OXIDE

mf: C₂₀H₁₂O mw: 268.32

SYNS: BENZO(1,2)PYRENO(4,5-b)OXIRENE-3b,4b-DIHYDRO □ BENZO(a)PYRENE-4,5-EPOXIDE □ BENZ(a)PYRENE 4,5-OXIDE □ BP-4,5-EPOXIDE □ BP 4,5-OXIDE

TOXICITY DATA with REFERENCE:

mimo-sat 250 ng/plate ENMUDM 7,839,85

mma-sat 1 µg/plate ENMUDM 7,839,85

mimo-esc 1 µg/plate TCMUD8 5,339,85

dnr-bcs 1- µg/plate CNREA8 45,2600,85

dnd-mam:lym 800 nmol CRNGDP 3,267,82

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic and neoplastigenic data. Mutation data reported. When heated to decomposition it emits acrid and irritating fumes.

BCV750 CAS: 36504-65-1 HR: 2
BENZO(a)PYRENE-7,8-OXIDE

mf: C₂₀H₁₂O mw: 268.32

PROP: Pale-yellow prisms.

SYNS: BENZO(10,11)CHRYSENO(1,2-b)OXIRENE-6-β,7-α-DIHYDRO □ BENZO(a)PYRENE-7,8-DIHYDRO-7,8-EPOXY □ BENZO(a)PYRENE-7,8-EPOXIDE □ 6-β,7-α-DIHYDRO BENZO(10,11)CHRYSENO(1,2-b)OXIRENE □ BP 7,8-EPOXIDE □ BP 7,8-OXIDE □ 7,8-EPOXY-7,8-DIHYDROBENZO(a)PYRENE

TOXICITY DATA with REFERENCE:

mimo-sat 250 ng/plate CNREA8 36,3350,76

mma-sat 25 µmol/L JBCHA3 251,4882,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Mutation data reported. When heated to decomposition it emits irritating fumes.

BCW000 CAS: 36504-66-2 HR: 2
BENZO(a)PYRENE-9,10-OXIDE

mf: C₂₀H₁₂O mw: 268.32

PROP: Pale-yellow prisms.

SYN: BP-9,10-OXIDE

TOXICITY DATA with REFERENCE:

mimo-sat 250 ng/plate CNREA8 36,3350,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCW250 CAS: 60448-19-3 HR: 2
BENZO(a)PYRENE-11,12-OXIDE

mf: C₂₀H₁₂O mw: 268.32

SYN: BP-11,12-OXIDE

TOXICITY DATA with REFERENCE:

mimo-sat 1 µg/plate CNREA8 36,3350,76

msc-ham:lng 5 mg/L CNREA8 36,3350,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic and neoplastigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCW750 CAS: 13345-23-8 HR: D
BENZO(a)PYREN-1-OL

mf: C₂₀H₁₂O mw: 268.32

PROP: Yellow crystals by sublimation.

SYN: 1-HYDROXYBENZO(a)PYRENE

TOXICITY DATA with REFERENCE:

mno-sat 7 µg/plate ENMUDM 7,839,85
 mma-sat 2500 ng/plate BCPA6 28,161,79
 dnd-hmn:fbr 30 µmol/L CBINA8 41,155,82
 mma-ham:lng 3700 nmol/L PNASA6 73,607,76
 msc-ham:lng 15 mg/L CNREA8 36,335,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCX000 CAS: 56892-30-9 HR: 2
BENZO(a)PYREN-2-OL

mf: C₂₀H₁₂O mw: 268.32

PROP: Crystals from C₆H₆. Mp: 227–228°.

SYN: 2-HYDROXYBENZO(a)PYRENE

TOXICITY DATA with REFERENCE:

mno-sat 8500 pmol/L RRBAD 18,291,81
 dnd-hmn:fbr 30 µmol/L CBINA8 41,155,82
 mma-sat 2 nmol/plate CNREA8 39,266,79
 mma-ham:lng 25 nmol/plate CNREA8 39,266,79
 msc-ham:lng 10 mg/L CNREA8 36,335,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic and neoplastigenic data. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCX250 CAS: 13345-21-6 HR: 2
BENZO(a)PYREN-3-OL

mf: C₂₀H₁₂O mw: 268.32

PROP: Yellow crystals from C₆H₆/pet ether. Mp: 226–227° (decomp).

SYNS: BP-3-HYDROXY □ 3-HYDROXYBENZO(a)PYRENE □ 8-HYDROXY-3,4-BENZOPYRENE

TOXICITY DATA with REFERENCE:

dnd-hmn:fbr 30 µmol/L CBINA8 41,155,82
 dnr-esc 250 mg/L JNCIAM 62,873,79
 msc-ham:lng 12 µmol/L PNASA6 73,607,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic and neoplastigenic data by skin contact. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCX500 CAS: 24027-84-7 HR: 2
BENZO(a)PYREN-5-OL

mf: C₂₀H₁₂O mw: 268.32

PROP: Yellow needles from toluene or by sublimation. Mp: 195–196° (decomp).

SYN: 5-HYDROXYBENZO(a)PYRENE

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. When heated to decomposition it emits acrid smoke and irritating fumes.

BCX750 CAS: 33953-73-0 HR: 2
BENZO(a)PYREN-6-OL

mf: C₂₀H₁₂O mw: 268.32

PROP: Needles from Et₂O/pet ether. Mp: 207–209°.

SYN: 6-HYDROXYBENZO(a)PYRENE

TOXICITY DATA with REFERENCE:

mma-sat 25 µmol/L JBCHA3 251,488,76
 mma-ham:lng 3700 nmol/L PNASA6 73,607,76
 mno-sat 7 µg/plate ENMUDM 7,839,85
 msc-ham:lng 5 mg/L CNREA8 36,335,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic and tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and fumes.

BCY000 CAS: 37994-82-4 HR: 2
BENZO(a)PYREN-7-OL

mf: C₂₀H₁₂O mw: 268.32

PROP: Yellow plates from C₆H₆/pet ether. Mp: 218–219°.

SYN: 7-HYDROXYBENZO(a)PYRENE

TOXICITY DATA with REFERENCE:

mno-sat 16 µg/plate MUREAV 36,379,76
 mma-sat 7 µg/plate ENMUDM 7,839,85
 dni-omi 200 µg/L PNASA6 74,137,77
 dnd-hmn:fbr 30 µmol/L CBINA8 41,155,82
 msc-ham:lng 12 µmol/L PNASA6 73,607,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic and neoplastigenic data by skin contact. Human mutation data reported. When heated to decomposition it emits acrid smoke and fumes.

BCY250 CAS: 17573-21-6 HR: 2
BENZO(a)PYREN-9-OL

mf: C₂₀H₁₂O mw: 268.32

PROP: Yellow needles from xylene. Mp: 196°.

SYN: 9-HYDROXYBENZO(a)PYRENE

TOXICITY DATA with REFERENCE:

mma-sat 7 µg/plate ENMUDM 7,839,85
 dnd-hmn:fbr 30 µmol/L CBINA8 41,155,82
 dnd-mam:lym 447 nmol CRNGDP 3,267,82

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data by skin contact. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCY500 CAS: 56892-31-0 HR: 2
BENZO(a)PYREN-10-OL
 mf: C₂₀H₁₂O mw: 268.32
PROP: Solid. Mp: 200–201°.
SYN: 10-HYDROXYBENZO(a)PYRENE
TOXICITY DATA with REFERENCE:
 mmo-sat 18,600 pmol/L RRBCAD 18,291,81
CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCY750 CAS: 56892-32-1 HR: 2
BENZO(a)PYREN-11-OL
 mf: C₂₀H₁₂O mw: 268.32
PROP: Yellow leaflets from C₆H₆. Mp: 220° (decomp).
SYN: 11-HYDROXYBENZO(a)PYRENE
TOXICITY DATA with REFERENCE:
 dnd-hmn:fbr 30 µmol/L CBINA8 41,155,82
CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCZ000 CAS: 56892-33-2 HR: 2
BENZO(a)PYREN-12-OL
 mf: C₂₀H₁₂O mw: 268.32
SYN: 12-HYDROXYBENZO(a)PYRENE
TOXICITY DATA with REFERENCE:
 mmo-sat 1 µg/plate CNREA8 36,3350,76
 mma-sat 7 µg/plate ENMUDM 7,839,85
 msc-ham:lng 15 mg/L CNREA8 36,3350,76
CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data by skin contact. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BCZ100 CAS: 3074-00-8 HR: D
6H-BENZO(cd)PYREN-6-ONE
 mf: C₁₉H₁₀O mw: 254.29
SYN: NAPHTHANTHRONE
TOXICITY DATA with REFERENCE:
 msc-hmn-lym 43 µg/ MUREAV 371,123,1996
SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BDA000 CAS: 207-89-6 HR: 2
7H-BENZO(a)PYRIDO(3,2-g)CARBAZOLE
 mf: C₁₉H₁₂N₂ mw: 268.33
SYN: 1,2-BENZOPYRIDO(3',2':5,6)CARBAZOLE
SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BDA250 CAS: 194-62-7 HR: 2
7H-BENZO(c)PYRIDO(2,3-g)CARBAZOLE
 mf: C₁₉H₁₂N₂ mw: 268.33
SYN: 5,6-BENZOPYRIDO(3',2':3,4)CARBAZOLE
SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BDA500 CAS: 194-60-5 HR: 2
7H-BENZO(c)PYRIDO(3,2-g)CARBAZOLE
 mf: C₁₉H₁₂N₂ mw: 268.33
SYN: 3,4-BENZOPYRIDO(3',2':5,6)CARBAZOLE
SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BDA750 CAS: 239-67-8 HR: 2
13H-BENZO(a)PYRIDO(3,2-i)CARBAZOLE
 mf: C₁₉H₁₂N₂ mw: 268.33
SYN: 7,8-BENZOPYRIDO(2',3':1,2)CARBAZOLE
SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BDB000 CAS: 207-88-5 HR: 2
13H-BENZO(g)PYRIDO(2,3-a)CARBAZOLE
 mf: C₁₉H₁₂N₂ mw: 268.33
SYN: 5,6-BENZOPYRIDO(2',3':1,2)CARBAZOLE
SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BDB250 CAS: 207-85-2 HR: 2
13H-BENZO(g)PYRIDO(3,2-a)CARBAZOLE
 mf: C₁₉H₁₂N₂ mw: 268.33
PROP: Straw-colored needles from EtOH. Mp: 368°.
SYN: 5,6-BENZOPYRIDO(3',2':1,2)CARBAZOLE
SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BDB500 CAS: 318-03-6 HR: 2
11H-BENZO(g)PYRIDO(4,3-b)INDOLE
 mf: C₁₅H₁₀N₂ mw: 218.27
SYN: 8,9-BENZO-γ-CARBOLINE
SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic fumes such as NO_x.

BDB750 CAS: 85-02-9 HR: D
BENZO(f)QUINOLINE
 mf: C₁₃H₉N mw: 179.23
PROP: Leaflets from H₂O or pet ether. Mp: 94°, bp: 350 @ 721 mm.
SYNS: 1-AZAPHENANTHRENE □ 5,6-BENZOQUINOLINE □ β-NAPHTHOQUINALDINE
TOXICITY DATA with REFERENCE:
 mma-sat 50 µg/plate 50NNAZ 7,73,83
 pic-esc 7500 ng/well MUREAV 260,349,91
CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BDC000 **CAS: 230-27-3** **HR: D**
BENZO(h)QUINOLINE

mf: C₁₃H₉N mw: 179.23

PROP: Plates from pet ether, leaflets from Et₂O. Mp: 52°, bp: 223 @ 47 mm.

SYNS: 4-AZAPHENANTHRENE □ α-BENZOQUINOLINE □ 7,8-BENZOQUINOLINE □ α-NAPHTHOQUINOLINE

TOXICITY DATA with REFERENCE:

mma-sat 50 µg/plate 50NNAZ 7,73,83

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BDC250 **CAS: 583-63-1** **HR: 3**
o-BENZOQUINONE

mf: C₆H₄O₂ mw: 108.10

PROP: Solid. Mp: 60–70° (decomp).

SYNS: 1,2-BENZOQUINONE □ BENZOQUINONE (DOT) □ 3,5-CYCLOHEXADIENE-1,2-DIONE □ o-QUINONE

TOXICITY DATA with REFERENCE:

mmo-sat 100 ng/plate BECTA6 24,590,80

SAFETY PROFILE: A poison. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BDC750 **CAS: 800-24-8** **HR: 3**
BENZOQUINONE AZIRIDINE

mf: C₁₆H₂₂N₂O₆ mw: 338.40

SYNS: A-139 □ AZIRIDYL BENZOQUINONE □ BAYER A 139 □ BAYER R39 SOLUBLE □ 2,5-BIS(1-AZIRIDINYL)-3,6-BIS(2-METHOXYETHOXY)-p-BENZOQUINONE □ 2,5-BIS(1-AZIRIDINYL)-3,6-BIS(2-METHOXYETHOXY)-2,5-CYCLOHEXADIENE-1,4-DIONE □ 2,5-BISMETHOXYETHOXY-3,6-BISETHYLENEIMINO-1,4-BENZOQUINONE □ 3,6-BIS(β-METHOXYETHOXY)-2,5-BIS(ETHYLENEIMINO)-p-BENZOQUINONE □ 3,6-BIS(β-METHOXYETHOXY)-2,5-BIS(ETHYLENEIMINO)-p-BENZOQUINONE □ E 39 SOLUBLE □ NSC-17262

TOXICITY DATA with REFERENCE:

dlt-dmg-orl 1 µmol/L MUREAV 14,250,72

ivn-dog LDLo:250 µg/kg CCSUBJ 2,203,65

ivn-mky LDLo:500 µg/kg CCSUBJ 2,203,65

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 9,51,75. EPA Genetic Toxicology Program.

SAFETY PROFILE: Deadly poison by intravenous route. Questionable carcinogen with experimental carcinogenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BDD000 **CAS: 495-73-8** **HR: 3**
1,4-BENZOQUINONE-N'-BENZOYLHYDRAZONE OXIME

mf: C₁₃H₁₁N₃O₂ mw: 241.27

SYNS: BAYER 15080 □ BENCHINOX □ BENGUINOX □ BENQUINOX □ BENZOIC ACID(4-(HYDROXYIMINO)-2,5-CYCLOHEXADIEN-1-YLIDENE) HYDRAZIDE □ p-BENZOQUINONE OXIME BENZOYLHYDRAZONE □ CEREDON □ CERELINE □ CERENOX □ CHINONOXIM-BENZOYLHYDRAZON (GERMAN) □ CHINONOXIME-BENZOYL

HYDRAZONE □ COBH □ GBH □ LERENOX □ QGH □ QUINONE OXIME BENZOYLHYDRAZONE □ TILLANTOX □ TSERENOX

TOXICITY DATA with REFERENCE:

orl-rat LD50:100 mg/kg FMCHA2 -,C48,83

orl-mus LD50:100 mg/kg GUCHAZ 6,34,73

SAFETY PROFILE: Poison by ingestion. When heated to decomposition it emits toxic NO_x.

BDD125 **HR: 3**
BENZOQUINONE-1,4-BIS(CHLOROIMINE)(1,4-BIS(CHLORIMIDO)-2,5-CYCLOHEXADIENE)

mf: C₆H₄Cl₂N₂ mw: 175.02



SAFETY PROFILE: Explodes on heating. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x.

BDD200 **CAS: 4377-73-5** **HR: 3**
1,4-BENZOQUINONE DIIMINE

mf: C₆H₆N₂ mw: 106.13

HN:C₆H₄:NH

SYN: 1,4-DIIMIDO-2,5-CYCLOHEXADIENE

SAFETY PROFILE: Explosive decomposition on contact with concentrated acids (e.g., sulfuric or nitric acid). Upon decomposition it emits toxic fumes of NO_x.

BDD250 **HR: 3**
p-BENZOQUINONE DIIMINE

mf: C₆H₆N₂ mw: 106.13

SAFETY PROFILE: It decomposes and explodes on contact with concentrated hydrochloric or sulfuric acids. Incompatible with acids. When heated to decomposition it emits toxic fumes of NO_x.

BDD500 **CAS: 3009-34-5** **HR: 3**
p-BENZOQUINONE MONOIMINE

mf: C₆H₅NO mw: 107.11

SYNS: p-BENZOQUINONE IMINE □ p-BENZOQUINONIMINE □ 2,5-CYCLOHEXADIEN-1-ONE, 4-IMINO- □ 4-IMINO-2,5-CYCLOHEXADIEN-1-ONE □ PBQI □ p-QUINONIMINE

SAFETY PROFILE: Experimental reproductive effects. The solid decomposes violently (nearly explosive). When heated to decomposition it emits toxic fumes of NO_x.

BDD600 **CAS: 24496-65-9** **HR: D**
BENZO(h)THEBENIDINE

mf: C₁₉H₁₁N mw: 253.31

SYNS: 12-AZABENZO(a)PYRENE □ DIBENZO(i,lmn)PHENANTHRIDINE

TOXICITY DATA with REFERENCE:

mic-sat 5 µLg/plate MUREAV 158,125,1985

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.

BDE000 **CAS: 37150-27-9** **HR: 3**
BENZO-1,2,3-THIADIAZOLE-1,1-DIOXIDE

mf: C₆H₄N₂O₂S mw: 168.17

PROP: Yellow-brown needles.



SAFETY PROFILE: The solid may explode spontaneously or on impact, friction or heating to 60°C. Upon decomposition it emits toxic fumes of NO_x and SO_x.

BDE250 CAS: 91-33-8 HR: 3
BENZOTHAZIDE

mf: C₁₅H₁₄ClN₃O₄S₃ mw: 431.95

SYNS: AQUATAG □ 3-((BENZYLTHIO)METHYL)-6-CHLORO-1,2,4-BENZOTHIADIAZINE-7-SULFONAMIDE-1,1-DIOXIDE □ 3-BENZYLTHIOMETHYL-6-CHLORO-2H-1,2,4-BENZOTHIADIAZINE-7-SULFONAMIDE-1,1-DIOXIDE □ 3-BENZYLTHIOMETHYL-6-CHLORO-7-SULFAMOYL-1,2,4-BENZOTHIADIAZINE-1,1-DIOXIDE □ 3-BENZYLTHIOMETHYL-6-CHLORO-7-SULFAMYL-1,2,4-BENZOTHIADIAZINE-1,1-DIOXIDE □ 3-BENZYLTHIOMETHYL-6-CHLORO-7-SULFAMYL-2H-1,2,4-BENZOTHIADIAZINE-1,1-DIOXIDE □ 6-CHLORO-3-((PHENYLMETHYL)THIO)METHYL-2H-1,2,4-BENZOTHIADIAZINE-7-SULFONAMIDE DIOXIDE □ EDEMEX □ EXNA □ EXOSALT □ FOVANE □ FREEURIL □ NACLEX □ P 1393 □ PFIZER 1393 □ URESE

TOXICITY DATA with REFERENCE:

ivn-rat LD50:422 mg/kg JPETAB 128,122,60
ivn-mus LD50:410 mg/kg JPETAB 128,122,60
ivn-dog LDLo:200 mg/kg JPETAB 128,122,60

SAFETY PROFILE: Poison by intravenous route. A diuretic and antihypertensive agent. When heated to decomposition it emits very toxic fumes of SO_x, NO_x, and Cl⁻.

BDE500 CAS: 95-16-9 HR: 3
BENZOTHAZOLE

mf: C₇H₅NS mw: 135.19

PROP: Liquid, odor of quinoline, sltly water-sol. D: 1.246 @ 20°/4°, bp: 223–225°.

SYNS: BENZOSULFONAZOLE □ O-2857 □ 1-THIA-3-AZAINdene □ USAF EK-4812

TOXICITY DATA with REFERENCE:

orl-rat LD50:466 mg/kg NTIS** AD-A172-647
ihl-rat LC:>1400 mg/m³/6H EPASR* BEHQ-1190-09875
ipr-rat LDLo:1 g/kg JPETAB 45,189,32
ivn-rat LDLo:200 mg/kg JPETAB 45,189,32
orl-mus LD50:900 mg/kg DCTODJ 3,249,80
ipr-mus LD50:100 mg/kg NTIS** AD277-689
ivn-mus LD50:95 mg/kg JPETAB 105,486,52
unr-mus LD50:310 mg/kg KHfZAN 9(12),11,75

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, intraperitoneal, intravenous, and possibly other routes. When heated to decomposition it emits very toxic fumes of SO_x, CN⁻, and NO_x.

BDE750 CAS: 120-78-5 HR: 3
BENZOTHAZOLE DISULFIDE

mf: C₁₄H₈N₂S₄ mw: 332.48

PROP: Cream to pale-yellow powder. Mp: 186°, d: 1.5.

SYNS: ALTAX □ BENZOTHAZOLYL DISULFIDE □ 2-BENZOTHAZOLYL DISULFIDE □ BIS(BENZOTHAZOLYL)

DISULFIDE □ BIS(2-BENZOTHAZYL) DISULFIDE □ DI-2-BENZOTHAZOLYLDISULFIDE □ DIBENZOTHAZYL DISULFIDE □ 2,2'-DIBENZOTHAZYL DISULFIDE □ DIBENZOYLTHIAZYL DISULFIDE □ DIBENZTHIAZYL DISULFIDE □ 2,2'-DITHIOBIS(BENZOTHAZOLE) □ DWUSIARCZEK DWUBENZOTIAZYL (POLISH) □ MBTS □ MBTS RUBBER ACCELERATOR □ 2-MERCAPTO BENZO THIAZOLEDISULFIDE □ 2-MERCAPTOBENZO THIAZYL DISULFIDE □ ROYAL MBTS □ THIOFIDE □ USAF B-33 □ USAF CY-5 □ USAF EK-5432 □ VULKACIT DM □ VULKACIT DM/MGC

TOXICITY DATA with REFERENCE:

mma-mus:lym 15 mg/L ENMUDM 5,193,83
ipr-rat LD50:2600 mg/kg IPSTB3 3,93,76
orl-mus LD50:7 g/kg IPSTB3 3,93,76
ipr-mus LD50:100 mg/kg NTIS** AD277-689
ivn-mus LD50:180 mg/kg CSLNX* NX#02251

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Slightly toxic by ingestion. Experimental teratogenic and reproductive effects. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits very toxic fumes of SO_x and NO_x. See also SULFIDES.

BDF000 CAS: 149-30-4 HR: 3
2-BENZOTHAZOLETHIOL

mf: C₇H₅NS₂ mw: 167.25

PROP: Light-yellow powder or needles from MeOH (aq). Mp: 177–179°. Sltly sol in EtOH, Et₂O, and AcOH; insol in H₂O; sol in alkalies.

SYNS: BENZOTHAZOLE-2-THIONE □ 2(3H)-BENZO-THIAZOL ETHIONE □ 2-BENZOTHAZOLYL MERCAPTAN □ CAPTAX □ KAPTAX □ MBT □ MERCAPTOBENZOTHAZOLE □ 2-MERCAPTOBENZOTHAZOLE □ 2-MERKAPTOBENZO-TIAZOL □ 2-MERKAPTOBENZTHIAZOL □ NCL-C56519 □ PENNAC MBT POWDER □ ROKON □ ROTAX □ SULFADENE □ USAF GY-3 □ USAF XR-29 □ VULKACIT MERCAPTO

TOXICITY DATA with REFERENCE:

sce-ham:ovr 351 mg/L NTPTR* NTP-TR-332,88
orl-rat LD50:100 mg/kg IPSTB3 3,93,76
ipr-rat LD50:300 mg/kg MEPAAX 16,35,65
orl-mus LD50:1851 mg/kg VCTDC* 10/12/82
ipr-mus LD50:100 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: NTP Carcinogenesis Studies (gavage); Some Evidence: rat NTPTR* NTP-TR-332,88; (gavage); Equivocal Evidence: mouse NTPTR* NTP-TR-332,88. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic and tumorigenic data. Poison by ingestion and intraperitoneal routes. Experimental teratogenic and reproductive effects. Mutation data reported. Incompatible with oxidizers. When heated to decomposition or on contact with acids or acid fumes it emits toxic SO_x and NO_x. See also MERCAPTANS.

BDF100 CAS: 4692-94-8 HR: 3
N-(2-BENZOTHAZOLYL)-ACETOACETAMIDE
mf: C₁₁H₁₀N₂O₂S mw: 234.29

SYNS: ACETOACETAMIDE, N-(2-BENZOTHAZOLYL)- □ 2-(ACETOACETAMIDO)BENZOTHAZOLE □ BUTANAMIDE, N-2-BENZOTHAZOLYL-3-OXO-(9CI)

TOXICITY DATA with REFERENCE:

ivn-mus LD50:56 mg/kg CSLNX* NX#02307

SAFETY PROFILE: A poison by intravenous route. When heated to decomposition it emits toxic vapors of NO_x and SO_x.

BDF250 CAS: 95-30-7 HR: 2 2-BENZOTHAZOLYL-N,N-DIETHYLTHIO-CARBAMYL SULFIDE

mf: C₁₂H₁₄N₂S₃ mw: 282.46

SYNS: 2-(N,N-

DIETHYLDITHIOCARBAMYL)BENZOATHIAZOLE □ ETHYLAC

TOXICITY DATA with REFERENCE:

orl-rat LD50:6 g/kg IPSTB3 3,93,76

orl-rbt LD50:2700 mg/kg RCTEA4 44,512,71

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. See also CARBAMATES. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.

BDF750 CAS: 95-32-9 HR: 1 2-BENZOTHAZOLYL MORPHOLINODISULFIDE

mf: C₁₁H₁₂N₂OS₃ mw: 284.43

PROP: Solid. Mp: 135–136°.

SYNS: MORFAX □ MORPHOLINO-2-BENZOTHAZOLYL DISULFIDE □ 2-(MORPHOLINODITHIO)BENZOTHAZOLE □ N-MORPHOLINYL-2-BENZOTHAZOLYL DISULFIDE □ 4-MORPHOLINYL-2-BENZOTHAZYL DISULFIDE □ N-OXYDIETHYL-2-BENZOTHAZOLSULFENAMID (CZECH) □ SULFENAX MOB (CZECH) □ VULCUREN 2

TOXICITY DATA with REFERENCE:

orl-mus LD50:3 g/kg SCIEAS 36(1-4),10,89

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mildly toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x and SO_x. See also SULFIDES.

BDG000 CAS: 102-77-2 HR: 3 2-BENZOTHAZOLYL-N-MORPHOLINOSULFIDE

mf: C₁₁H₁₂N₂OS₂ mw: 252.37

SYNS: AMAX □ 2-BENZOTHAZOLYLSULFENYL MORPHOLINE □ 4-(2-BENZOTHAZOLYLTHIO)MORPHOLINE □ 2-(MORPHOLINOTHIO)BENZOTHAZOLE □ MORPHOLINYL MERCAPTOBENZOTHAZOLE □ 2-(4-MORPHOLINYL THIO)BENZOTHAZOLE □ N-(OXYDIETHYLENE) BENZOTHAZOLE-2-SULFENAMIDE □ SANTOCURE MOR □ SULFENAMIDE M □ USAF CY-7 □ VULCAFOR BSM

TOXICITY DATA with REFERENCE:

eye-rbt 100 mg/24H MOD 85JCAE -,1099,86

dnr-esc 10 µg/tube ENMUDM 5,193,83

mma-mus:lym 15 mg/L ENMUDM 5,193,83

otr-mus:emb 200 µg/L ENMUDM 5,193,83

msc-mus:lym 10 mg/L ENMUDM 5,193,83

orl-rat LD50:1980 mg/kg IPSTB3 3,93,76

orl-mus LD50:1870 mg/kg 20ZJAG -,64,68 NTIS** AD277-689

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. Questionable carcinogen with experimental neoplastigenic data. Experimental teratogenic effects. An eye irritant. Mutation data reported. See also MERCAPTANS and SULFIDES. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.

BDG100 CAS: 73250-68-7 HR: 3 2-(1,3-BENZOTHAZOL-2-YLOXY)-N-METHYL-ACETANILIDE

mf: C₁₆H₁₄N₂O₂S mw: 298.38

SYNS: ACETAMIDE, 2-(2-BENZOTHAZOLYLOXY)-N-METHYL-N-PHENYL- □ 2-(2-BENZOTHAZOLYLOXY)-N-METHYL-N-PHENYLACETAMIDE □ FOE 1976 □ MEFENACET □ NTN 801

TOXICITY DATA with REFERENCE:

orl-rat LD50:>5 g/kg PEMNDP 9,544,1991

ihl-rat LC50:>94,500 µg/m³ NNGADV 13,633,1988

skn-rat LD50:>5 g/kg PEMNDP 9,544,1991

ipr-rat LD50:>1 g/kg NNGADV 13,633,1988

scu-rat LD50:>1 g/kg NNGADV 13,633,1988

orl-mus LD50:>5 g/kg PEMNDP 9,544,1991

ipr-mus LD50:>1 g/kg NNGADV 13,633,1988

SAFETY PROFILE: A poison by inhalation. Moderately toxic by intraperitoneal and subcutaneous routes. Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x.

BDG250 CAS: 1079-33-0 HR: 3 BENZO(b)THIEN-4-YL METHYLCARBAMATE

mf: C₁₀H₉NO₂S mw: 207.26

SYNS: 4-BENZOTHIENYL METHYLCARBAMATE □ BENZO(b)THIOPHENE-4-OL METHYLCARBAMATE □ ENT 27,041 □ MCA-600 □ MOBAM □ MOBAM PHENOL □ MOBIL MC-A-600 □ MOS-708 □ OMS-708

TOXICITY DATA with REFERENCE:

orl-rat LD50:70 mg/kg TXAPA9 11,546,67

ipr-rat LD50:40,800 µg/kg BWHO6 44(1-3),241,71

ivn-rat LD50:24,800 µg/kg BWHO6 44(1-3),241,71

orl-gpg LDLo:50 mg/kg JEENAI 60,733,67

scu-gpg LDLo:25 mg/kg JEENAI 60,733,67

orl-pgn LD50:52,600 µg/kg ASTTA8 (680),157,79

orl-bwd LD50:17,800 µg/kg ASTTA8 (680),157,79

SAFETY PROFILE: Poison by ingestion, intraperitoneal, intravenous, subcutaneous, and possibly other routes. See also CARBAMATES. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.

BDG275 CAS: 104795-68-8 HR: 3 BENZO(b)THIOPHENE-2-CARBOXAMIDE, 5-METHOXY-3-(1-METHYLETHOXY)-N-1H-TETRAZOL-5-YL-, MONOSODIUM SALT

mf: C₁₄H₁₅N₅O₃S⁻Na mw: 356.39

SYN: CI 159

TOXICITY DATA with REFERENCE:

unr-mus LD50:80 mg/kg TXCYAC 98,111,95

SAFETY PROFILE: A poison by an unreported route. When heated to decomposition it emits toxic vapors of NO_x and SO_x.

BDG325 CAS: 724-34-5 HR: 3
6-BENZOTHIOPURINE

mf: C₁₂H₁₀N₄S mw: 242.32

SYNS: 6-BENZYL MERCAPTOPYRINE □ 6-BENZYL-MP □ 6-(BENZYLTHIO)PURINE □ NSC-29421 □ 6-((PHENYLMETHYL)THIO)-1H-PURINE (9CI)

TOXICITY DATA with REFERENCE:

ipr-mus LD50:501 mg/kg NCISP* JAN86

par-mus LD50:180 mg/kg JPMSAE 71,618,82

SAFETY PROFILE: Poison by parenteral route.

Moderately toxic by other routes. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x and SO_x.

BDH000 CAS: 90-16-4 HR: 3
1,2,3-BENZOTRIAZIN-4(1H)-ONE

mf: C₇H₅N₃O mw: 147.15

PROP: Needles from cyclohexane.

SYNS: BENZAZIMIDE □ BENZAZIMIDONE □ BENZOKETCTRIAZINE □ 3H-1,2,3-BENZOTRIAZIN-4-ONE □ 4-KETO-BENZO TRIAZINE □ USAF MA-2

TOXICITY DATA with REFERENCE:

ipr-mus LD50:50 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal route. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.

BDH250 CAS: 95-14-7 HR: 3
1H-BENZOTRIAZOLE

mf: C₆H₅N₃ mw: 119.14



PROP: Needles from C₆H₆. Mp: 100°. Sol in C₆H₆.

SYNS: 1,2-AMINOZOPHENYLENE □ AZIMIDOBENZENE □ AZIMINO BENZENE □ BENZENE AZIMIDE □ BENZISO TRIAZOLE □ 1,2,3-BENZOTRIAZOLE □ COBRATEC #99 □ 2,3-DIAZAINDOLE □ NCI-C03521 □ NSC-3058 □ 1,2,3-TRIAZAINDENE □ U-6233

TOXICITY DATA with REFERENCE:

mma-sat 100 µg/plate IARCCD 27,283,80

mno-esc 333 µg/plate ENMUDM 7(Suppl 5),1,85

mma-esc 33,300 ng/plate ENMUDM 7(Suppl 5),1,85

otr-rat:emb 94 µg/plate JJATDK 1,190,81

orl-rat LD50:600 mg/kg GISAAA 46(11),70,81

orl-mus LD50:615 mg/kg NTIS** AD-A067-313

ipr-mus LD50:400 mg/kg FATOAO 41,708,78

ipr-mus LD50:1000 mg/kg CNCRA6 30,9,63

ivn-mus LD50:238 mg/kg JPETAB 105,486,52

CONSENSUS REPORTS: NCI Carcinogenesis Bioassay (feed); Inadequate Studies: mouse, rat NCITR* NCI-CG-TR-88,78. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion and intraperitoneal routes. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. May detonate at 220°C or

during vacuum distillation. When heated to decomposition it emits toxic fumes of NO_x.

BDH500 CAS: 98-08-8 HR: 3
BENZOTRIFLUORIDE

DOT: UN 2338

mf: C₇H₅F₃ mw: 146.12

PROP: Water-white liquid; aromatic odor. Mp: -29.1°, bp: 98-99° @ 725 mm, flash p: 54°F (CC), d: 1.197 @ 15.5°/15.5°, vap d: 5.04, vap press: 11 mm @ 0°.

SYNS: BENZENYL FLUORIDE □ BENZYLIDYNE FLUORIDE □ PHENYLFLUOROFORM □ (TRIFLUOROMETHYL)BENZENE □ α,α,α-TRIFLUOROTOLUENE □ ω-TRIFLUOROTOLUENE □ USAF MA-16

TOXICITY DATA with REFERENCE:

orl-rat LD50:15,000 mg/kg TPKVAL 10,131,68

ihl-rat LC50:70,810 mg/m³/4H 85GMAT -,25,82

orl-mus LD50:10,000 mg/kg TPKVAL 10,131,68

ihl-mus LC50:92,240 mg/m³/2H 85GMAT -,25,82

ipr-mus LD50:100 mg/kg NTIS** AD277-689

scu-frg LDLo:870 mg/kg AEPPAE 130,250,28

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Poison by intraperitoneal route.

Moderately toxic by subcutaneous route. See also FLUORIDES. Dangerous fire hazard. To fight fire, use water, foam, CO₂, spray mist, dry chemical. When heated to decomposition it emits toxic fumes of F⁻. Incompatible with oxidizing materials.

BDH750 CAS: 215-58-7 HR: 2
BENZO(b)TRIPHENYLENE

mf: C₂₂H₁₄ mw: 278.36

PROP: Clear plates, leaflets or needles from EtOH or AcOH. Mp: 205°.

SYNS: DB(a,c)A □ DIBENZ(a,c)ANTHRACENE □ 1,2,3,4-DIBENZ ANTHRACENE □ DIBENZO(a,c)ANTHRACENE □ 1,2,3,4-DIBENZOANTHRACENE

TOXICITY DATA with REFERENCE:

mma-sat 10 µg/plate PNASA6 72,5135,75

dnd-hmn:emb 360 nmol/L CBINA8 22,257,78

dns-hmn:hla 100 nmol/L CNREA8 38,2625,78

msc-ham:lng 1 mg/L PNASA6 73,188,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program. IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 32,289,83

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BDI000 CAS: 86-13-5 HR: 3
BENZOTROPINE

mf: C₂₁H₂₅NO mw: 307.47

SYNS: BENZOTROPINE □ 3-α-(DIPHENYLMETHOXY)-1-α-H,5-α-H-TROPANE

TOXICITY DATA with REFERENCE:

scu-mus LD50:60 mg/kg JMPCAS 4,215,61

ivn-mus LD50:25 mg/kg JMPCAS 4,215,61

SAFETY PROFILE: Poison by subcutaneous and intravenous routes. When heated to decomposition it emits toxic fumes of NO_x.

BDI100 CAS: 17359-54-5 HR: D
2H-1,4-BENZOXAZIN-3(4H)-ONE, 2,4-DIHYDROXY

mf: C₈H₇NO₄ mw: 181.16

SYNS: DIBOA □ 2,4-DIHYDROXY-1,4-BENZOXAZINONE □ 2,4-DIHYDROXY-2H-1,4-BENZOXAZIN-3(4H)-ONE

TOXICITY DATA with REFERENCE:

mic-sat 500 µLg/plate MUREAV 66,191,1979

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.

BDI500 CAS: 273-53-0 HR: 3
BENZOXAZOLE

mf: C₇H₅NO mw: 119.13

PROP: Solid. Mp: 31°, bp: 183°. Insol in water.

SYNS: 1-OXA-3-AZAINDENE □ USAF EK-5017

TOXICITY DATA with REFERENCE:

orl-mus LD50:750 mg/kg MDCHAG 4(1),336,64

ipr-mus LD50:250 mg/kg MDCHAG 4(1),336,64

ivn-mus LD50:179 mg/kg JPETAB 105,486,52

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes such as NO_x.

BDJ000 CAS: 59-49-4 HR: 3
2-BENZOXAZOLINONE

mf: C₇H₅NO₂ mw: 135.13

PROP: Solid. Mp: 141–142°.

SYNS: 2-BENZOXAXOLOL □ BENZOXAZOLINONE □

BENZOXAZOLONE □ 2(3H)-BENZOXAZOLONE □ 2-

HYDROXYBENZOXAZOLE □ USAF EK-5429

TOXICITY DATA with REFERENCE:

orl-rat LD50:700 mg/kg MDCHAG 4(1),308,64

orl-mus LD50:554 mg/kg GTPZAB 31(8),36,87

ipr-mus LD50:400 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x.

BDJ250 CAS: 2310-17-0 HR: 3
S-((3-BENZOXAZOLINYL-6-CHLORO-2-OXO)-METHYL) O,O-DIETHYLPHOSPHORODITHIOATE

mf: C₁₂H₁₅ClNO₄PS₂ mw: 367.82

PROP: Crystals with garlic odor. Mp: 47.5–48.0°. Insol in H₂O and hydrocarbons.

SYNS: AZOFENE □ BENZOPHOSPHATE □ BENZPHOS □ CHIPMAN 11974 □ S-(6-CHLORO-3-(MERCAPTOMETHYL)-2-BENZOXAZOLINONE)-O,O-DIETHYL PHOSPHORODITHIOATE □ 3-(6-CHLORO-2-OXOBENZOXAZOLIN-3-YL)METHYL-O,O-DIETHYL PHOSPHOROTHIOLOTHIONATE □ O,O-DIAETHYL-S-(6-CHLOR-2-OXO-BEN(b)-1,3-OXALIN-3-

YL)-METHYL-DIT HIOPHOSPHAT (GERMAN) □ O,O-DIETHYL-S-((6-CHLOOR-2-OXO-BENZOXAZOLIN-3-YL)-METHYL)-DITHIO FOSFAAT (DUTCH) □ O,O-DIETHYL-S-(6-CHLORO-BENZOXAZOLINYL-3-METHYL)DITHIOPHOSPHATE □ O,O-DIETHYL-S-((6-CHLORO-2-OXOBENZOXAZOLIN-3-YL)METHYL) PHOSPHORODI-THIOATE □ O,O-DIETHYL-S-(6-CHLORO-2-OXO-BENZOX-AZOLIN-3-YL)METHYL-PHOSPHORO THIOLOTHIONATE □ 3-DIETHYL DITHIOPHOSPHORYLMETHYL-6-CHLORO-BENZOXAZOL-ONE-2 □ O,O-DIETIL-S-((6-CLORO-2-OXO-BENZOSSAZOLIN-3-IL)-METIL)-DITIOFOSFATO (ITALIAN) □ ENT 27,163 □ FOZALON □ NIA-9241 □ NIAGARA 9241 □ NPH-1091 □ PHASOLON □ PHOSALON □ PHOSALONE □ PHOZALON □ RHODIA RP 11974 □ RUBITOX □ ZOLON □ ZOLONE □ ZOLONE PM □ ZOOLON

TOXICITY DATA with REFERENCE:

orl-rat LD50:85 mg/kg KSKZAN 16(2),59,78

skn-rat LD50:390 mg/kg WRPCA2 9,119,70

unr-rat LD50:135 mg/kg 30ZDA9 -,371,71

orl-mus LD50:73 mg/kg GTPZAB 19(9),55,75

skn-rbt LD50:1000 mg/kg 85DPAN -,71,76

orl-gpg LD50:150 mg/kg GUCHAZ 6,408,73

orl-ckn LD50:661 mg/kg VETNAL 54(11),75,78

CONSENSUS REPORTS: EPA: Farm Worker Field Reentry FEREAC 39,16888,74.

SAFETY PROFILE: Poison by ingestion, skin contact, and possibly other routes. A cholinesterase inhibitor. See also PARATHION. When heated to decomposition it emits very toxic fumes of Cl⁻, NO_x, PO_x, and SO_x.

BDJ500 CAS: 790-60-3 HR: D
BENZ(a)OXIRENO(c)ANTHRACENE

mf: C₁₈H₁₀O mw: 242.28

SYNS: BENZ(a)ANTHRACENE-5,6-EPOXIDE □ BENZ(a)ANTHRACENE-5,6-OXIDE □ BENZ(3,4)ANTHRA(1,2-6)-OXIRENE

TOXICITY DATA with REFERENCE:

cyt-hmn:fbr 1500 ng/L EXMDA4 350,58,75

oms-mus:oth 1 mg/L CBINA8 4,389,71,72

dnd-ham:lng 1 mg/L CBINA8 4,389,71/72

otr-mus:oth 500 µg/L PNASA6 68,1098,71

SAFETY PROFILE: Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.

BDJ600 CAS: 19379-90-9 HR: 2
BENZOXONIUM CHLORIDE

mf: C₂₃H₄₂NO₂•Cl mw: 400.11

SYNS: ABSONAL □ ABSONAL V □ AMMONIUM, BENZYLBI(2-HYDROXYETHYL)DODECYL-, CHLORIDE □ BACTOFEN □ BELORAN □ BENZENEMETHANAMINIUM, N-DODECYL-N,N-BIS(2-HYDROXYETHYL)-, CHLORIDE (9CI) □ BENZYLDO DECYLBI(2-HYDROXYETHYL)AMMONIUM CHLORIDE (6CI,7CI) □ BIALCOL □ BRADOPHEN □ COHORTAN □ D301 □ DI(2-HYDROXYETHYL)BENZYLDO-DECYLAMMONIUM CHLORIDE □ N-DODECYL-N,N-BIS(2-HYDROXYETHYL)BENZENEME THANAMINIUM CHLORIDE □ DODECYL-DI(β-OXYAETHYL)-BENZYL-AMMONIUM-CHLORID □ KATANOL C12 □ LOMADES □ OROFAR □ ZY 15021

TOXICITY DATA with REFERENCE:

orl-rat LD50:750 mg/kg EGESAQ 32,395,88

ipr-mus LD50:1584 mg/kg PCJOAU 10,55,76

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic vapors of NH_4^+ and Cl^- .

BDJ750 CAS: 92-16-0 HR: 2

BENZOYLACET-*o*-ANISIDIDE

mf: $\text{C}_{16}\text{H}_{15}\text{NO}_3$ mw: 269.32

TOXICITY DATA with REFERENCE:

orl-rat LDLo:1600 mg/kg KODAK* -,71

ipr-rat LDLo:800 mg/kg KODAK* -,71

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x .

BDJ800 CAS: 93-91-4 HR: 2

BENZOYLACETONE

mf: $\text{C}_{10}\text{H}_{10}\text{O}_2$ mw: 162.20

PROP: Pale yellow crystalline powder. Mp: 58–60°, d: 1.090.

SYNS: ACETOACETOPHENONE □ α -ACETYLACETO PHENONE □ 2-ACETYLACETOPHENONE □ ACETYLBENZOYL METHANE □ BENZOYL-ACETON □ 1,3-BUTANEDIONE, 1-PHENYL-

TOXICITY DATA with REFERENCE:

orl-rat LD:>500 mg/kg NCNSA6 5,28,53

unr-rat LDLo:600 mg/kg BCPA6 14,1325,65

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BDK750 CAS: 117-05-5 HR: 2

5-BENZOYLAMINO-1-CHLOROANTHRAQUINONE

mf: $\text{C}_{21}\text{H}_{12}\text{ClNO}_3$ mw: 361.79

SYNS: 1-BENZAMIDO-5-CHLORO-ANTHRAQUINONE □ 1-CHLOR-5-BENZOYLAMINOANTHRACHINON (CZECH) □ 1-CHLORO-5-BENZAMIDO-ANTHRAQUINONE □ N-(5-CHLORO-9,10-DIHYDRO-9,10-DIOXO-1-ANTHRACENYL)-BENZAMIDE □ 1-X-5-BAA (RUSSIAN)

TOXICITY DATA with REFERENCE:

eye-rbt 500 mg/24H MLD 28ZPAK -,89,72

mno-sat 50 $\mu\text{g}/\text{plate}$ MUREAV 40,203,76

ipr-rat LD50:3000 mg/kg GTPZAB 21(12),27,77

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by intraperitoneal route. An eye irritant. Mutation data reported. When heated to decomposition it emits very toxic fumes of NO_x and Cl^- .

BDK800 CAS: 135-57-9 HR: 1

***o*-(BENZOYLAMINO)PHENYL DISULFIDE**

mf: $\text{C}_{26}\text{H}_{20}\text{N}_2\text{O}_2\text{S}_2$ mw: 456.60

SYNS: BENZANILIDE, 2',2''-DITHIOBIS- □ BENZAMIDE, N,N'-(DITHIODI-2,1-PHENYLENE)BIS- □ BIS(*o*-

BENZAMIDOPHENYL) DISULFIDE □ BIS(2-BENZAMIDOPHENYL) DISULFIDE □ BIS-*o*-BENZOYLAMINOPHENYL-DISULFID □ *o,o'*-DIBENZAMIDO DIPHENYL DISULFIDE □ DI-*o*-BENZAMIDOPHENYL DISULPHIDE □ 2,2'-DIBENZOYL-AMINODIPHENYL DISULFIDE □ 2',2''-DITHIOBISBENZANILIDE □ 2',2''-DITHIODIBENZ ANILIDE □ N,N'-(DITHIODI-2,1-PHENYLENE)BISBENZAMIDE □ PEPTAZIN BAFD □ PEPTISANT 10 □ PEPTON 22

TOXICITY DATA with REFERENCE:

eye-rbt 500 mg/24H MLD 85JCAE -,1007,86

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: An eye irritant. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BDL750 CAS: 582-61-6 HR: 3

BENZOYL AZIDE

mf: $\text{C}_7\text{H}_5\text{N}_3\text{O}$ mw: 147.14

SYNS: BENZAZIDE □ BENZOIC ACID AZIDE

DOT CLASSIFICATION: Forbidden

SAFETY PROFILE: May explode when heated above 120°C. See also AZIDES.

BDL850 CAS: 85-52-9 HR: 2

2-BENZOYLBENZOIC ACID

mf: $\text{C}_{14}\text{H}_{10}\text{O}_3$ mw: 226.24

SYNS: BENZOIC ACID, *o*-BENZOYL- □ BENZOIC ACID, 2-BENZOYL- □ BENZOPHENONE-2-CARBOXYLIC ACID

TOXICITY DATA with REFERENCE:

orl-rat LD50:4600 mg/kg GTPZAB 15(11),52,71

orl-mus LD50:880 mg/kg GTPZAB 15(11),52,71

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BDL860 CAS: 611-95-0 HR: 3

***p*-BENZOYLBENZOIC ACID**

mf: $\text{C}_{14}\text{H}_{10}\text{O}_3$ mw: 226.23

SYN: BENZOIC ACID, 4-BENZOYL-

TOXICITY DATA with REFERENCE:

ivn-rat TDLo:11,312 $\mu\text{g}/\text{kg}$ BIPBU* 25,686,2002

SAFETY PROFILE: A poison by intravenous route. When heated to decomposition it emits acrid smoke and irritating vapors.

BDM500 CAS: 98-88-4 HR: 3

BENZOYL CHLORIDE

DOT: UN 1736

mf: $\text{C}_7\text{H}_5\text{ClO}$ mw: 140.57

PROP: Colorless, fuming, pungent liquid; decomposes in water. Fp: -1° , mp: -0.5° , bp: 197° , flash p: 162°F (CC), d: 1.22 @ $15^\circ/15^\circ$, vap press: 1 mm @ 32.1° , vap d: 4.88.

SYNS: BENZENECARBONYL CHLORIDE □ BENZOIC ACID, CHLORIDE □ BENZOYL CHLORIDE (DOT) □ α -CHLORO BENZALDEHYDE

TOXICITY DATA with REFERENCE:

mno-sat 1 $\mu\text{mol}/\text{plate}$ MUREAV 58,11,78

ihl-hmn TCLo:2 ppm/1M:NOSE,PUL TGNCDL 2,31,61

orl-rat LDLo:1900 mg/kg 85GMAT -,25,82

ihl-rat LC50:1870 mg/m³/2H 85GMAT -,25,82

CONSENSUS REPORTS: IARC Cancer Review:

Group 3 IMEMDT 7,56,87, Human Inadequate Evidence IMEMDT 29,83,82; Animal Inadequate Evidence IMEMDT 29,83,82. Community Right-To-Know List. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

DFG MAK: Confirmed Human Carcinogen

DOT CLASSIFICATION: 8; Label: Corrosive

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data by skin contact. Human systemic effects by inhalation: unspecified effects on olfaction and respiratory systems. Corrosive effects on the skin, eyes, and mucous membranes by inhalation. Flammable when exposed to heat or flame. Will react with water or steam to produce heat and toxic and corrosive fumes. Violent or explosive reaction with dimethyl sulfoxide, and aluminum chloride + naphthalene. To fight fire, use alcohol foam, CO₂, dry chemical. Incompatible with dimethyl sulfoxide, (NaN₃ + KOH), water, steam, and oxidizers. When heated to decomposition it emits toxic fumes of Cl⁻. See also CHLORIDES and ALDEHYDES.

BDM600 CAS: 15424-14-3 HR: 3
BENZOYL CHLORIDE, PHENYLHYDRAZONE

mf: C₁₃H₁₁ClN₂ mw: 230.71

TOXICITY DATA with REFERENCE:

orl-mus LD50:90 mg/kg PCJOAU 14,162,80

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BDM700 CAS: 62214-31-7 HR: 2
1-BENZOYL-2-(FURFURYLIDENE)HYDRAZINE

mf: C₁₂H₁₀N₂O₂ mw: 214.24

SYNS: BENZOIC ACID, (2-FURANYLMETHYLENE)-HYDRAZIDE (9CI) □ BENZOIC ACID, FURFURYLIDENE HYDRAZONE

TOXICITY DATA with REFERENCE:

orl-mus LD50:527 mg/kg YHHPAL 24,737,1989

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x.

BDN125 CAS: 62303-19-9 HR: 3
2-BENZOYLHYDRAZONO-1,3-DITHIOLANE

mf: C₁₀H₁₀N₂OS₂ mw: 238.34

SYNS: BHD □ YU 7802

TOXICITY DATA with REFERENCE:

sce-hmn:lym 200 µg/L CIYPDA 15,318,84

orl-rat LD50:72,800 µg/kg CIYPDA 15,318,84

orl-mus LD50:111 mg/kg CIYPDA 15,318,84

orl-gpg LD50:383 mg/kg CIYPDA 15,318,84

SAFETY PROFILE: Poison by ingestion. Human mutation data reported. When heated to decomposition it emits toxic fumes of SO_x and NO_x.

BDN150 CAS: 198126-85-1 HR: 3
1-BENZOYLNAPELLINE

mf: C₂₉H₃₇NO₄ mw: 463.67

SYN: 12,3,6A-ETHANYLYLIDENE-9,11A-METHANOAZULENO (2,1-B)AZOCINE-6,8,11-TRIOL, TETRADECAHYDRO-1-ETHYL-3-METHYL-10-METHYLENE-, 6-BENZOATE, (3R-(3-α,6-β,6A-α,6B-α,8-β,9-β, 11A,11A-β,12A,12A-β,14R*))-

TOXICITY DATA with REFERENCE:

ivn-mus LD50:31,600 µg/kg EJPHAZ 337,165,1997

SAFETY PROFILE: A poison by intravenous route. When heated to decomposition it emits toxic vapors of NO_x.

BDN200 CAS: 52222-87-4 HR: 3
6-BENZOYL-2-NAPHTHOL

mf: C₁₇H₁₂O₂ mw: 248.29

SYN: KETONE, 6-HYDROXY-2-NAPHTHYL PHENYL

TOXICITY DATA with REFERENCE:

otr-ham:kdy 80 µg/L BJCAAI 37,873,78

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Mutation data reported. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.

BDN500 CAS: 6786-32-9 HR: 3
BENZOYL NITRATE

mf: C₇H₅NO₄ mw: 167.12

SAFETY PROFILE: An unstable heat- and light-sensitive explosive. Decomposes explosively on contact with trace amounts of water. Upon decomposition it emits toxic fumes of NO_x. See also NITRATES.

BDN600 CAS: 110690-43-2 HR: 3
3-(3-(6-BENZOYLOXY-3-CYANO-2-PYRIDYLOXY CARBONYL)BENZOYL)-1-ETHOXYMETHYL-5-FLUOROURACIL

mf: C₂₈H₁₉FN₄O₈ mw: 558.51

SYNS: BENZOIC ACID, 3-((3-(ETHOXYMETHYL)-5-FLUORO-3,6-DIHYDRO-2,6-DIOXO-1(2H)-PYRIMIDINYL)CARB ONYL)-, □ BOF-A2 □ EMITEFUR

TOXICITY DATA with REFERENCE:

mnt-orl-mus 40 mg/kg/4D-C JTSCDR 18(Suppl 3),11,1993

uns-ham-ovr 60 mg/L JTSCDR 18(Suppl 3),11,1993

cyt-ham-ovr 60 mg/L JTSCDR 18(Suppl 3),11,1993

dni-orl-mus 420 mg/kg/4W-I CALEDQ 137,17,1999

orl-rat LD50:1850 mg/kg YACHDS 22,81,1994

scu-rat LD50:250 mg/kg YACHDS 22,81,1994

orl-mus LD50:>5 g/kg YACHDS 22,81,1994

orl-mky LD50:250 mg/kg YACHDS 22,81,1994

SAFETY PROFILE: A poison by ingestion and subcutaneous routes. Experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x and F⁻.

BDO199 CAS: 55398-24-8 HR: 2
N-BENZOYLOXY-N-ETHYL-4-AMINOAZOBENZENE

mf: C₂₁H₁₉N₃O₂ mw: 345.43

SAFETY PROFILE: Questionable carcinogen with experimental neoplastic data. See also AZIDES. When heated to decomposition it emits toxic fumes of NO_x.

BDO500 CAS: 55398-26-0 HR: 2

N-BENZOYLOXY-4'-ETHYL-N-METHYL-4-AMINOAZOBENZENEmf: $C_{22}H_{21}N_3O_2$ mw: 359.46**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic fumes such as NO_x .**BDP000 CAS: 6098-46-0 HR: 2
N-BENZOYLOXY-N-METHYL-4-AMINOAZOBENZENE**mf: $C_{20}H_{17}N_3O_2$ mw: 331.40**SYNS:** o-BENZOYL-N-METHYL-N-(p-(PHENYLAZO)PHENYL)HYDROXYLAMINE □ N-(BENZOYLOXY)-N-METHYL-4-(PHENYL AZO)-BENZENAMINE**TOXICITY DATA with REFERENCE:**

mmo-sat 100 nmol/plate CALEDQ 1,91,75

dnd-esc 60 mmol/L CNREA8 40,2493,80

dnd-rat:lvrl 50 mmol/L CBINA8 31,1,80

CONSENSUS REPORTS: EPA Genetic Toxicology Program.**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. Mutation data reported. See also AZIDES. When heated to decomposition it emits toxic fumes of NO_x .**BDP500 CAS: 42978-42-7 HR: 2
6-BENZOYLOXYMETHYLBENZO(a)PYRENE**mf: $C_{28}H_{18}O_2$ mw: 386.46**SAFETY PROFILE:** Questionable carcinogen with experimental carcinogenic and neoplastigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.**BDP899 CAS: 67371-65-7 HR: D
N-BENZOYLOXY-3'-METHYL-4-METHYLAMINOAZOBENZENE**mf: $C_{21}H_{19}N_3O_2$ mw: 345.40**TOXICITY DATA with REFERENCE:**otr-rat:lvrl 20 μ mol/L JJIND8 76,95,86dns-rat:lvrl 1 μ mol/L JJIND8 76,95,86cyt-rat:lvrl 50 μ mol/L JJIND8 76,95,86**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x .**BDQ000 CAS: 55398-25-9 HR: 2
N-BENZOYLOXY-4'-METHYL-N-METHYL-4-AMINOAZOBENZENE**mf: $C_{21}H_{19}N_3O_2$ mw: 345.43**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. See also AZIDES. When heated to decomposition it emits toxic fumes of NO_x .**BDQ250 CAS: 31012-29-0 HR: 2
7-BENZOYLOXYMETHYL-12-METHYLBENZ(a)-ANTHRACENE**mf: $C_{27}H_{20}O_2$ mw: 376.47**SYN:** 12-METHYLBENZ(a)ANTHRACENE-7-METHANOL BENZOATE (ESTER)**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. See also ESTERS. When

heated to decomposition it emits very acrid smoke and irritating fumes.

**BDR750 CAS: 4342-36-3 HR: 3
BENZOYLOXYTRIBUTYLSTANNANE**mf: $C_{19}H_{32}O_2Sn$ mw: 411.20**SYNS:** TRIBUTYL TIN BENZOATE □ TRI-N-BUTYL-ZINN BENZOATE (GERMAN)**TOXICITY DATA with REFERENCE:**

orl-rat LD50:132 mg/kg ARZNAD 19,934,69

scu-rat LD50:505 mg/kg TRIPA7 -,1,73

orl-mus LD50:108 mg/kg ATXKA8 23,283,68

ivn-mus LD50:178 mg/kg CSLNX* NX#00090

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**OSHA PEL:** TWA 0.1 mg(Sn)/m³ (skin)**ACGIH TLV:** TWA 0.1 mg(Sn)/m³; STEL 0.2 mg(Sn)/m³ (skin).**DFG MAK:** 0.0021 ppm (0.05 mg/m³)**NIOSH REL:** (Organotin Compounds) TWA 0.1 mg(Sn)/m³**SAFETY PROFILE:** Poison by ingestion and intravenous routes. Moderately toxic by subcutaneous route. See also TIN COMPOUNDS. When heated to decomposition it emits acrid smoke and irritating fumes.**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: Organotin Compounds 5504.**BDS000 CAS: 94-36-0 HR: 3
BENZOYL PEROXIDE**mf: $C_{14}H_{10}O_4$ mw: 242.24**PROP:** White, granular, tasteless, odorless powder or prisms. Mp: 106–108.6° (decomp), bp: decomposes explosively, autoign temp: 176°F. Sol in benzene, acetone, chloroform; sltly sol in alc; insol in water. IDLH 1500 mg/m³.**SYNS:** ACETOXYL □ ACNEGEL □ AZTEC BPO □ BENOXYL □ BENZAC □ BENZAKNEW □ BENZOIC ACID, PEROXIDE □ BENZOPEROXIDE □ BENZOYL □ BENZOYLPEROXID (GERMAN) □ BENZOYLPEROXYDE (DUTCH) □ BENZOYL SUPEROXIDE □ BZF-60 □ CADET □ CADOX □ CLEARASIL BENZOYL PEROXIDE LOTION □ CLEARASIL BP ACNE TREATMENT □ CUTICURA ACNE CREAM □ DEBROXIDE □ DIBENZOYLPEROXID (GERMAN) □ DIBENZOYL PEROXIDE (MAK) □ DIBENZOYLPEROXYDE (DUTCH) □ DIPHENYL GLYOXAL PEROXIDE □ DRY AND CLEAR □ EPI-CLEAR □ FOSTEX □ GAROX □ INCIDOL □ LOROXIDE □ LUCIDOL □ LUPERCO □ LUPEROX FL □ NAYPER B and BO □ NOROX BZP-250 □ NOVADELOX □ OXY-5 □ OXY-10 □ OXYLITE □ OXY WASH □ PANOXYL □ PEROSSIDO di BENZOILE (ITALIAN) □ PEROXYDE de BENZOYLE (FRENCH) □ PERSADOX □ QUINOLOR COMPOUND □ SULFOXYL □ SUPEROX □ THERADERM □ TOPEX □ VANOXIDE □ XERAC**TOXICITY DATA with REFERENCE:**

eye-rbt 500 mg/24H MLD 28ZPAK -,52,72

dnd-hmn:oth 100 μ mol/L CNREA8 45,2522,85dni-ham:oth 56 μ mol/L CNREA8 45,2522,85

dns-rat:lvrl 100 pmol/L CRNGDP 5,1547,84

orl-rat LD50:7710 mg/kg 28ZPAK -,52,72

orl-mus LD50:5700 mg/kg GISAAA 32(3),31,67

ipr-mus LDLo:250 mg/kg YKYUA6 31,855,80

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Inadequate Evidence IMEMDT 36,267,85; Human Inadequate Evidence IMEMDT 36,267,85. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program. Community Right-To-Know List.

OSHA PEL: TWA 5 mg/m³

ACGIH TLV: TWA 5 mg/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 5 mg/m³; Weak allergin and skin irritant

NIOSH REL: (Benzoyl Peroxide) TWA 5 mg/m³

SAFETY PROFILE: Poison by intraperitoneal route. Can cause dermatitis, asthmatic effects, testicular atrophy, and vasodilation. An allergen and eye irritant. Human mutation data reported. Questionable carcinogen with experimental tumorigenic data. Moderate fire hazard by spontaneous chemical reaction in contact with reducing agents. It ignites readily and burns rapidly. A powerful oxidizer. Dangerous explosion hazard; may explode spontaneously when heated to above melting point, or when overheated under confinement. It is moderately sensitive to heat, shock, friction, or contact with combustible materials. Explosive decomposition above the mp (103°) forms flammable products.

Explosive or violent reaction on contact with N,N-dimethylaniline, aniline, dimethyl sulfide, lithium tetrahydroaluminate, and N-bromosuccinimide + 4-toluic acid. Mixture with carbon tetrachloride + ethylene explodes at elevated temperatures and pressures. Reacts violently in contact with various organic or inorganic acids, alcohols, amines, metallic naphthenates, as well as with polymerization accelerators, e.g., dimethylaniline, and (CCl₄ + C₂H₄). Violent reaction with charcoal when heated above 50°. Decomposition produces dense white smoke of benzoic acid, phenyl benzoate, terphenyls, biphenyls, benzene, and carbon dioxide. Vigorous reaction leading to ignition with methylmethacrylate, and vinyl acetate + ethyl acetate. To fight fire, use water spray, foam. All precautions must be taken to guard against fire and explosion hazards. Keep in a cool place, out of the direct rays of the sun, away from sparks, open flames, and other sources of heat, avoid shock, rough handling, friction from grinding, etc. Isolated storage is required; keep away from possible contact with acids, alcohols, ethers, or other reducing agents or polymerization catalysts such as dimethylaniline. Complete instructions on storage and handling available from manufacturer. See also PEROXIDES.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Benzoyl Peroxide, 5009.

BDS250

HR: 2

BENZOYL PEROXIDE, WET

PROP: A paste or wetted granular material containing at least 30% water. Autoign temp 176°F.

SAFETY PROFILE: Moderate fire hazard by chemical reaction with reducing agents; a powerful oxidizer. Mixed with a large surplus of water (i.e., 30%), this material is relatively safe. It is most dangerous when it contains very little water (1% or less). To fight fire, use water, foam or spray. Care must be taken to prevent drying out of wet material. See BENZOYL PEROXIDE.

BDS300

CAS: 744-80-9

HR: 2

BENZOYLPHENOBARBITAL

mf: C₁₉H₁₆N₂O₄ mw: 336.37

PROP: Solid. Mp: 134–135°.

SYNS: BENZOBARBITAL □ BENZONAL □ 1-BENZOYL-5-ETHYL-5-PHENYLBARBITURIC ACID □ 1-BENZOYL-5-ETHYL-5-PHENYL-2,4,6-TRIOXOHEXAHYDROPYRIMIDINE □ BENZOYL LUMINAL □ BENZOYLUMINAL □ 2,4,6(1H,3H,5H)-PYRIMIDINE TRIONE, 1-BENZOYL-5-ETHYL-5-PHENYL-(9CI)

TOXICITY DATA with REFERENCE:

dlt-mus-orl 20 mg/kg CYGEDX 10(2),1,76

orl-mus LD50:982 mg/kg APSXAS 6,177,69

SAFETY PROFILE: Moderately toxic by ingestion. Experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BDS500

CAS: 23107-96-2

HR: 3

o-BENZOYL PHENYLACETIC ACID

mf: C₁₅H₁₂O₃ mw: 240.27

SYNS: ACIDE BENZOYL-2-PHENYLACETIQUE (FRENCH) □ 2-BENZOYLPHENYLACETIC ACID

TOXICITY DATA with REFERENCE:

orl-mus LD50:2700 mg/kg EJMCA5 9,397,74

ipr-mus LDLo:300 mg/kg EJMCA5 11,7,76

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating fumes.

BDS750

CAS: 38940-50-0

HR: 3

(4-BENZOYL-4-PHENYLBUTYL)TRIETHYL-AMMONIUM IODIDE

mf: C₂₃H₃₂NO•I mw: 465.46

SYN: DEOXY(α-(3-TRIETHYLAMMONIO)PROPYL)BENZON, IODIDE

TOXICITY DATA with REFERENCE:

orl-mus LD50:800 mg/kg CHTPBA 7,287,72

ivn-mus LD50:6500 µg/kg CHTPBA 7,287,72

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. See also IODIDES. When heated to decomposition it emits very toxic fumes of I⁻, NH₃, and NO_x.

BDT000

HR: 3

1,1-BENZOYL PHENYL DIAZOMETHANE

mf: C₁₄H₁₀N₂O mw: 222.25

SAFETY PROFILE: It may explode above 40°. When heated to decomposition it emits toxic fumes of NO_x.

BDT500

CAS: 24026-35-5

HR: 3

2-(3-BENZOYLPHENYL)-N,N-DIMETHYL ACETAMIDE

mf: C₁₇H₁₇NO₂ mw: 267.35

TOXICITY DATA with REFERENCE:

orl-mus LDLo:300 mg/kg EJMCA5 11,7,76

ipr-mus LDLo:100 mg/kg EJMCA5 11,7,76

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x.

BDT750

CAS: 59512-21-9

HR: 3

**2-(3-BENZOYLPHENYL)-N,N-DIMETHYL
PROPIONAMIDE**mf: C₁₈H₁₉NO₂ mw: 281.38**TOXICITY DATA with REFERENCE:**

orl-mus LDLo:300 mg/kg EJMA5 11,7,76

ipr-mus LDLo:100 mg/kg EJMA5 11,7,76

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x.**BDU000 CAS: 72596-00-0 HR: D
(4-BENZOYL-*o*-PHENYLENEDIAMINE)
DICHLOROPLATINUM(II)**mf: C₁₃H₁₂Cl₂N₂OPt mw: 478.26**PROP:** IDLH 4 mg/m³ (as Pt).**TOXICITY DATA with REFERENCE:**

mmo-sat 30 nmol/L JMCMA 23,459,80

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x. See also PLATINUM COMPOUNDS.**BDU250 CAS: 38940-51-1 HR: 3
(5-BENZOYL-5-PHENYLPENTYL)TRIETHYL
AMMONIUM IODIDE**mf: C₂₄H₃₄NO•I mw: 479.49**SYN:** DEOXY(α-(4-TRIETHYLAMMONIO)BUTYL)BENZOIN IODIDE**TOXICITY DATA with REFERENCE:**

orl-mus LD50:1000 mg/kg CHTPBA 7,287,72

ivn-mus LD50:1900 µg/kg CHTPBA 7,287,72

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. See also IODIDES. When heated to decomposition it emits very toxic fumes of I⁻, NH₃, and NO_x.**BDU500 CAS: 22071-15-4 HR: 3
2-(*m*-BENZOYLPHENYL)PROPIONIC ACID**mf: C₁₆H₁₄O₃ mw: 254.30**SYNS:** ALRHEUMAT □ ALRHEUMUM □ *m*-BENZOYLHYDRA TROPIC ACID □ 3-BENZOYLHYDRATROPIC ACID □ 2-(3-BENZOYLPHENYL)PROPIONIC ACID □ CAPISTEN □ FASTUM □ ISO-K □ KEFENID □ KETOPROFEN □ KETOPRON □ LERTUS □ MEPROFEN □ ORUDIS □ ORUVAIL □ PROFENID □ 19583 RP**TOXICITY DATA with REFERENCE:**

orl-hmn TDLo:714 µg/kg:GIT JCPCBR 24,486,84

orl-wmn TDLo:80 mg/kg/10D-I:SYS BMJOAE 292,97,86

unr-chd TDLo:300 mg/kg/15D-I:BRN,CNS,GIT

NEJMAG 300,796,79

orl-rat LD50:62,400 µg/kg ARZNAD 34,280,84

ipr-rat LD50:80 mg/kg NIIRDN 6,265,82

scu-rat LD50:100 mg/kg JNPAG 2,259,71

ivn-rat LD50:350 mg/kg IYKEDH 9,222,78

rec-rat LD50:84 mg/kg JTSCLR 6,209,81

orl-mus LD50:360 mg/kg PJPPAA 38,107,86

ipr-mus LD50:300 mg/kg EJMA5 11,7,76

scu-mus LD50:550 mg/kg JNPAG 2,259,71

ivn-mus LD50:500 mg/kg JNPAG 2,259,71

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by ingestion, subcutaneous, intravenous, rectal, and intraperitoneal

routes. Human systemic effects by an unspecified route: headache, nausea or vomiting, and degenerative changes in the brain, changes in kidney tubules. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating fumes. An anti-inflammatory and analgesic agent.

**BDV250 CAS: 63989-75-3 HR: 3
N-BENZOYL TRIMETHYL COLCHICINIC ACID
METHYL ETHER**mf: C₂₇H₂₇NO₆ mw: 461.55**SYNS:** N-BENZOYL-N-DEACETYL COLCHICINE □ N-BENZOYL TMCA METHYL ETHER**TOXICITY DATA with REFERENCE:**

oms-mus-ipr 8 mg/kg CANCAR 3,130,50

oms-mus-par 32 mg/kg CANCAR 3,134,50

spm-mus-par 32 mg/kg CANCAR 3,134,50

ipr-mus LD50:32 mg/kg MDREP* No. 204,49

ims-mus LD50:27,924 mg/kg JMCMA 26,1365,83

scu-cat LDLo:12,500 µg/kg AEXPBL 72,228,13

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. Mutation data reported. See also COLCHICINE and ETHERS. When heated to decomposition it emits toxic fumes of NO_x.**BDV500 CAS: 1027-30-1 HR: 3
BENZPHETAMINE HYDROCHLORIDE**mf: C₁₇H₂₁N•ClH mw: 275.85**SYN:** (+)-N-BENZYL-N,α-DIMETHYLPHENETHYLAMINE HYDROCHLORIDE**TOXICITY DATA with REFERENCE:**

orl-rat LD50:160 mg/kg CTCEA9 2,33,60

orl-mus LD50:227 mg/kg CTCEA9 2,33,60

ipr-mus LD50:153 mg/kg CTCEA9 2,33,60

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of HCl and NO_x.**BDV750 CAS: 5929-01-1 HR: 2
1:2-BENZPYRENE PICRATE**mf: C₂₀H₁₂•C₆H₃N₃O₇ mw: 481.44**SYN:** BENZO(a)PYRENE MONOPICRATE**SAFETY PROFILE:** Questionable carcinogen with experimental mutagenic data by skin contact. See also NITRATES. When heated to decomposition it emits toxic fumes of NO_x.**BDW000 CAS: 113-69-9 HR: 3
BENZQUINAMIDE HYDROCHLORIDE**mf: C₂₂H₃₂N₂O₅•ClH mw: 441.02**SYNS:** EMETE-CON □ EMETICON □ NSC-64375**TOXICITY DATA with REFERENCE:**

orl-rat LD50:990 mg/kg TXAPA9 18,185,71

orl-mus LD50:580 mg/kg MDACAP 11,9,75

ipr-mus LD50:376 mg/kg TXAPA9 18,185,71

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x. A tranquilizer and antiemetic.**BDW100 CAS: 599-71-3 HR: 1**

BENZSULFOHYDROXAMIC ACIDmf: C₆H₇NO₃S mw: 173.20**SYN:** HYDROXAMIC ACID, BENZSULFO-**TOXICITY DATA with REFERENCE:**orl-rat LD₅₀:>500 mg/kg NCNSA6 5,42,53

scu-mus LDLo:1 g/kg AIPTAK 12,447,04

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Slightly toxic by subcutaneous route. When heated to decomposition it emits toxic vapors of NO_x and SO_x.**BDW650****HR: 3****BENZVALENE**mf: C₆H₆ mw: 78.11**SAFETY PROFILE:** This strained ring compound is a friction-sensitive explosive. It may be handled safely in an ether solution. Upon decomposition it emits acrid smoke and fumes.**BDW750****CAS: 29193-35-9****HR: 3****(3-(N-BENZYLACETAMIDO)-2,4,6-TRIIODO
PHENYL)ACETIC ACID**mf: C₁₇H₁₄I₃NO₃ mw: 661.02**TOXICITY DATA with REFERENCE:**orl-mus LD₅₀:1550 mg/kg JMC MAR 13,559,70ivn-mus LD₅₀:235 mg/kg JMC MAR 13,559,70**SAFETY PROFILE:** Poison by intravenous route.Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x and I⁻.**BDX000****CAS: 140-11-4****HR: 3****BENZYL ACETATE**mf: C₉H₁₀O₂ mw: 150.19**PROP:** Colorless liquid; sweet, floral fruity odor. Mp: -51.5°, bp: 134° @ 102 mm, flash p: 216°F (CC), d: 1.06, autoign temp: 862°F, vap press: 1 mm @ 45°, vap d: 5.1, refr index: 1.501. Sol in alc, most fixed oils, propylene glycol; insol in glycerin and water @ 214°.**SYNS:** ACETIC ACID BENZYL ESTER □ ACETIC ACID PHENYLMETHYL ESTER □ α-ACETOXYTOLUENE □ BENZYL ETHANOATE □ FEMA No. 2135 □ NCI-C06508**TOXICITY DATA with REFERENCE:**

skn-rbt 100 mg/24H MOD CTOIDG 94(8),41,79

dnr-bcs 21 mg/disc OIGZDE 34,267,85

mma-hmn:lyms 1500 mg/L MUREAV 196,61,88

mma-mus:lyms 500 mg/L MUREAV 196,61,88

msc-mus:lyms 700 mg/L SCIEAS 236,933,87

ihl-hmn TClO:50 ppm:PSY,PUL,GLN TGNCDL 2,31,61

orl-rat LD₅₀:2490 mg/kg FCTXAV 2,327,64orl-mus LD₅₀:830 mg/kg GISAAA 50(7),17,85ihl-mus LCLo:1300 mg/m³/22H AGGHAR 5,1,33ihl-cat LC₅₀:245 ppm/8H AMIHAB 21,28,60

skn-cat LDLo:10 g/kg JPETAB 84,358,45

orl-rbt LD₅₀:2200 mg/kg GISAAA 50(7),17,85

scu-rbt LDLo:3000 mg/kg AGGHAR 5,1,33

orl-gpg LD₅₀:2200 mg/kg GISAAA 50(7),17,85

scu-gpg LDLo:3000 mg/kg AGGHAR 5,1,33

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 40,109,86. NTP Carcinogenesis Studies

(gavage); Some Evidence: mouse, rat NTPTR* NTP-TR-250,86. Reported in EPA TSCA Inventory.

ACGIH TLV: TWA 10 ppm; Not Classifiable as a Human Carcinogen**SAFETY PROFILE:** A poison by inhalation.

Moderately toxic by ingestion and subcutaneous routes.

Human systemic effects by inhalation: an antipsychotic, unspecified respiratory and urinary system effects.

Questionable carcinogen with experimental tumorigenic data. Combustible liquid. To fight fire, use alcohol foam, CO₂. When heated to decomposition it emits irritating fumes. See also ESTERS.**BDX033****CAS: 36366-91-3****HR: D****10-BENZYLACRIDINIUM ORANGE**mf: C₂₄H₂₆N₃ mw: 356.53**SYNS:** ACRIDINIUM, 3,6-BIS(DIMETHYLAMINO)-10-(PHENYLMETHYL)- □ 3,6-BIS(DIMETHYLAMINO)-10-BENZYLACRIDINIUM CHLORIDE**TOXICITY DATA with REFERENCE:**

add-unr-lym 10 pph BIPMAA 11,2537,1972

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.**BDX090****CAS: 1214-39-7****HR: 2****6-BENZYLADENINE**mf: C₁₂H₁₁N₅ mw: 225.28**SYNS:** ABG 3034 □ ADENINE, N-BENZYL- □ BA □ 6-BA □ BA (GROWTH STIMULANT) □ BAP □ 6-BAP □ BAP (GROWTH STIMULANT) □ BENZYLADENINE □ N-BENZYLADENINE □ N⁶-BENZYLADENINE □ BENZYLAMINOPURINE □ N⁶-(BENZYLAMINO)PURINE □ 6-(BENZYLAMINO)PURINE □ 6-(N-BENZYLAMINO)PURINE □ N-(PHENYLMETHYL)-1H-PURIN-6-AMINE □ 1H-PURIN-6-AMINE, N-(PHENYLMETHYL)-(9CI) □ SD 4901 □ SQ 4609**TOXICITY DATA with REFERENCE:**

oth-hmn:leu 100 nmol/L EXPEAM 32,29,76

oth-hmn:leu 10 μmol/L EXPEAM 32,29,76

orl-rat LD₅₀:2125 mg/kg TOIZAG 19,336,72orl-mus LD₅₀:1300 mg/kg TOIZAG 19,336,72skn-mus LD₅₀:>5 g/kg TOIZAG 19,336,72scu-mus LD₅₀:>2300 mg/kg TOIZAG 19,336,72**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Moderately toxic by ingestion and skin contact. Human mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.**BDX100****CAS: 4261-14-7****HR: D****9-BENZYLADENINE**mf: C₁₂H₁₁N₅ mw: 225.28**SYNS:** ADENINE, 9-BENZYL- □ 9-BAP □ N⁹-BENZYLADENINE □ 9-BENZYLAMINOPURINE □ 9-BENZYL-6-AMINOPURINE □ 9H-PURIN-6-AMINE, 9-(PHENYLMETHYL)-(9CI) □ SQ 21611**SAFETY PROFILE:** Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.**BDX500****CAS: 100-51-6****HR: 3****BENZYL ALCOHOL**

mf: C₇H₈O mw: 108.15

PROP: Found in jasmine, hyacinth, ylang-ylang oils, and at least two dozen other essential oils (FCTXAV 11,1011,73). Water-white liquid; faint, aromatic odor, sharp burning taste. Mp: -15.3°, bp: 205.3°, flash p: 213°F (CC), d: 1.050, autoign temp: 817°F, vap press: 1 mm @ 58.0°, vap d: 3.72, refr index: 1.540. Misc with alc, chloroform, ether, and water @ 206°(decomp). Moderately sol in water.

SYNS: BENZAL ALCOHOL □ BENZENECARBINOL □ BENZENEMETHANOL □ BENZOYL ALCOHOL □ FEMA No. 2137 □ HYDROXYTOLUENE □ α-HYDROXYTOLUENE □ NCI-C06111 □ PHENOLCARBINOL □ PHENYL CARBINOL □ PHENYL METHANOL □ PHENYLMETHYL ALCOHOL □ α-TOLUENOL

TOXICITY DATA with REFERENCE:

skn-man 16 mg/48H MLD CTOIDG 94(8),41,79
 skn-rbt 10 mg/24H open MLD AMIHC 4,119,51
 eye-rbt 750 µg open SEV AMIHC 4,119,51
 skn-pig 100% MOD FCTXAV 11,1011,73
 dnr-bcs 21 mg/disc OIGZSE 34,267,85
 orl-rat LD50:1230 mg/kg FCTXAV 2,327,64
 ihl-rat LCLo:2000 ppm/4H JIDHAN 31,343,49
 ipr-rat LD50:400 mg/kg NPIR* 1,6,74
 scu-rat LDLo:1700 mg/kg RMSRA6 15,561,1895
 ivn-rat LD50:53 mg/kg TXAPA9 18,60,71
 orl-mus LD50:1360 mg/kg GISAAA 50(7),81,85
 ivn-mus LD50:324 mg/kg AIPTAK 135,330,62
 ivn-dog LDLo:50 mg/kg TXAPA9 18,60,71
 par-dog LDLo:9 mg/kg TXAPA9 25,153,73
 skn-cat LDLo:10 g/kg JPETAB 84,358,45

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, intraperitoneal, intravenous, and parenteral routes. Moderately toxic by inhalation, skin contact, and subcutaneous routes. A moderate skin and severe eye irritant. Mutation data reported. Combustible liquid. Mixtures with sulfuric acid decompose explosively at 180°. Exothermic polymerization is catalyzed by HBr + iron when heated above 100°. To fight fire, use alcohol foam, CO₂, dry chemical. When heated to decomposition it emits acrid smoke and fumes. See also ALCOHOLS.

BDX750 CAS: 100-46-9 HR: 2 BENZYLAMINE

mf: C₇H₉N mw: 107.2

PROP: Strongly alkaline liquid; miscible with water, alcohol and ether. D: 0.983 @ 19°/4°, bp: 185°.

SYNS: (AMINOMETHYL)BENZENE □ α-AMINOTOLUENE □ ω-AMINOTOLUENE □ BENZENEMETHANAMINE (9CI) □ MONOBENZYLAMINE □ (PHENYLMETHYL)AMINE □ SUMINE 2005 □ SUMINE 2006

TOXICITY DATA with REFERENCE:

ipr-mus LD50:600 mg/kg USXXAM #3816470
 orl-uns LD50:700 mg/kg GISAAA 39(4),86,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. An irritant to skin, eyes and mucous membranes. See also AMINES. When heated to

decomposition it emits toxic fumes. Violent or explosive reaction with N-chlorosuccinimide. See also ALKALIES.

BDY000 CAS: 3287-99-8 HR: 3 BENZYLAMINE HYDROCHLORIDE

mf: C₇H₉N•ClH mw: 143.63

PROP: Solid. Mp: 255–257°.

SYNS: BENZYENEMETHAMAMINE HYDROCHLORIDE □ BENZYLAMMONIUM CHLORIDE □ USAF EL-82

TOXICITY DATA with REFERENCE:

ipr-mus LD50:500 mg/kg NTIS** AD277-689
 ivn-mus LD50:220 mg/kg APFRAD 9,390,51

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by intraperitoneal route. When heated to decomposition it emits very toxic fumes of HCl, NH₃, and NO_x. See also AROMATIC AMINES.

BDY250 CAS: 77966-31-5 HR: 3 2-(BENZYLAMINO)-6'-CHLORO-o-ACETO TOLUIDIDE HYDROCHLORIDE

mf: C₁₆H₁₇ClN₂O•ClH mw: 325.26

SYN: C 3117

TOXICITY DATA with REFERENCE:

eye-rbt 2% MLD ARZNAD 8,407,58
 ipr-rat LD50:280 mg/kg ARZNAD 8,407,58
 scu-mus LD50:1175 mg/kg ARZNAD 8,407,58

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by subcutaneous route. An eye irritant. When heated to decomposition it emits very toxic fumes of Cl⁻, NO_x, and HCl.

BDY500 CAS: 52400-76-7 HR: 3 2-(2-(BENZYLAMINO)ETHYL)-2-METHYL-1,3- BENZODIOXOLE HYDROCHLORIDE

mf: C₁₇H₁₉NO₂•ClH mw: 305.83

TOXICITY DATA with REFERENCE:

ivn-rat LD50:15 mg/kg EJMCA5 12,413,77
 ipr-mus LD50:110 mg/kg EJMCA5 12,413,77

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of HCl and NO_x.

BDY669 CAS: 61-33-6 HR: 3 BENZYL-6-AMINOPENICILLINIC ACID

mf: C₁₆H₁₈N₂O₄S mw: 334.42

PROP: Crystals.

SYNS: ABBOCILLIN □ (5R,6R)-BENXYLPENICILLIN □ BENZOPENICILLIN □ BENZYL PENICILLIN □ BENZYL PENICILLINIC ACID □ CILLORAL □ CILOPEN □ COMPOCILLIN G □ COSMOPEN □ DROPICILLIN □ FREE BENZYL PENICILLIN □ GALOFAK □ GELACILLIN □ LIQUACILLIN □ PENICILLIN G □ PHENYLACETAMIDO PENICILLANIC ACID □ (PHENYLMETHYL) PENICILLINIC ACID □ PRADUPEN □ SPECILLINE G

TOXICITY DATA with REFERENCE:

dnr-esc 20 µL/disc MUREAV 97,1,82
 dnr-bcs 100 µL/plate MUREAV 97,1,82
 mmo-omi 12 µg/L ARMA7 81,1,72
 oms-omi 20 µg/L AMACQ 17,572,80

par-chd TDLo:15,000 units/kg; NOSE, CNS, PUL
BJCAA1 17,100,63

orl-rat LD50:8 g/kg ANTCAO 12,249,62

unk-rat LD50:9 g/kg ANTBAL 23, 317,78

orl-mus LD50:>5 g/kg AACHAX -,619,67

ipr-mus LD50:3500 mg/kg AACHAX -,619,67

ivn-mus LD50:329 mg/kg BCPA6 16,1365,67

ice-mus LD50:5700 µg/kg JLCMAK 34,126,49

unk-mus LD50:7800 mg/kg ANTBAL 23,317,78

ice-rbt LD50:1118 µg/kg JLCMAK 34,126,49

isp-dog LD50:4940 µg/kg JLCMAK 34,126,49

ice-rbt LD50:653 µg/kg JLCMAK 34,126,49

orl-ham LD50:24 mg/kg TXAPA9 14,510,69

scu-ham LD50:96 mg/kg TXAPA9 14,510,69

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Poison by ingestion, intravenous, intracerebral, intraspinal, subcutaneous, and possibly other routes. Human (child) systemic effects by parenteral route: changes in cochlear (inner ear) structure or function, convulsions, and dyspnea. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits very toxic fumes of NO_x and SO_x. See other penicillin entries.

BDY750 CAS: 103-14-0 HR: 2
4-(BENZYLAMINO)PHENOL

mf: C₁₃H₁₃NO mw: 199.27

SYN: PHENOL, p-(BENZYLAMINO)-

TOXICITY DATA with REFERENCE:

orl-rat LDLo:500 mg/kg JPETAB 90,260,47

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x.

BEA000 CAS: 67465-04-7 HR: 3
2-BENZYLAMINOPYRIDINE HYDROCHLORIDE

mf: C₁₂H₁₂N₂•ClH mw: 220.70

SYNS: 2-BAP HYDROCHLORIDE □ N-(2-PYRIDYL)BENZYLAMINE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-mus LD50:1187 mg/kg TXAPA9 37,165,76

ipr-mus LD50:220 mg/kg TXAPA9 37,165,76

ivn-mus LD50:90 mg/kg JPETAB 84,16,45

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x and HCl. See also AROMATIC AMINES.

BEA100 CAS: 2312-73-4 HR: 2
6-BENZYLAMINO-9-TETRAHYDROPYRAN-2-YL-9H-PURINE

mf: C₁₇H₁₉N₅O mw: 309.41

SYNS: ACCEL □ ADENINE, N-BENZYL-9-(TETRAHYDRO-2H-PYRAN-2-YL)-(8CI) □ N-BENZYL-9-(TETRAHYDRO-2H-PYRAN-2-YL)ADENINE □ BPA □ PBA □ PBA (GROWTH STIMULANT) □ 9H-PURINE, 6-BENZYLAMINO-9-TETRAHYDROPYRAN-2-YL- □ SD 8339

TOXICITY DATA with REFERENCE:

orl-rat LD50:1640 mg/kg 85AREA 3,48,76/77

SAFETY PROFILE: Moderately toxic by ingestion. Experimental reproductive effects. When heated to decomposition it emits toxic vapors of NO_x.

BEA250 CAS: 64059-29-6 HR: 2
BENZYL AMMONIUM TETRACHLOROIODATE

mf: C₇H₁₀N•Cl₄IO mw: 392.88

TOXICITY DATA with REFERENCE:

orl-rat LD50:1230 mg/kg TXAPA9 28,313,74

skn-rbt LD50:840 mg/kg TXAPA9 28,313,74

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. When heated to decomposition it emits very toxic fumes of Cl⁻, I⁻, NH₃ and NO_x.

BEA275 CAS: 101997-51-7 HR: 3
1-(2-(N-BENZYLANILINO)ETHYL)PIPERIDINE HYDROCHLORIDE

mf: C₂₀H₂₆N₂•ClH mw: 330.94

SYNS: N-β-(BENZILFENILAMINO)ETILPIPERIDINA

CLORIDRATO (ITALIAN) □ N-β-(BENZYL-PHENYLAMINO)ETHYLPIPERIDINE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

ims-rat LDLo:380 mg/kg FRPSAX 15,562,60

orl-mus LD50:1500 mg/kg FRPSAX 13,3,58

ipr-mus LD50:180 mg/kg FRPSAX 15,562,60

ivn-mus LD50:25 mg/kg FRPSAX 13,3,58

ipr-gpg LD50:110 mg/kg BSCIA3 31,520,49

SAFETY PROFILE: Poison by intravenous, intramuscular, and intraperitoneal routes. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x and HCl.

BEA325 CAS: 622-79-7 HR: 3
BENZYL AZIDE

mf: C₇N₇N₃ mw: 133.15

PROP: Liquid. D: 1.0655 @ 25 mm, bp: 108° @ 23 mm. Insol in water.

SAFETY PROFILE: A heat-sensitive explosive. Explosive reaction with bis(trifluoromethyl)nitroxide. Upon decomposition it emits toxic fumes of NO_x. See also AZIDES.

BEA500 CAS: 36226-64-9 HR: 3
BENZYLBARBITAL

mf: C₁₃H₁₄N₂O₃ mw: 246.29

SYNS: 5-BENZYL-5-ETHYLBARBITURIC ACID □

ETHYLBENZYLBARBITURIC ACID □ 5-ETHYL-5-(PHENYLMETHYL)-2,4,6-(1H,3H,5H)-PYRIMIDINETRIONE (9CI)

TOXICITY DATA with REFERENCE:

ipr-mus LD50:73 mg/kg JPETAB 89,356,47

orl-cat LDLo:400 mg/kg JPETAB 26,371,25

scu-rbt LDLo:60 mg/kg JACSAT 45,243,23

SAFETY PROFILE: Poison by ingestion, intraperitoneal, and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x. An hypnotic agent. See also BARBITURATES.

BEA825 CAS: 621-72-7 HR: 3
2-BENZYLBENZIMIDAZOLE

mf: C₁₄H₁₂N₂ mw: 208.28

PROP: Crystals or needles from benzene. Mp: 187°. Practically insol in water; freely sol in glacial acetic acid; sol in alc, hot benzene, and propylene glycol.

SYNS: BENDAZOL □ BENDAZOLE □ 2-BENZYLBENZIMINAZOLE □ DIBASOL □ DIBAZOL □ DIBAZOLE □ 2-(PHENYLMETHYL)-1H-BENZIMIDAZOLE □ TROMASEDAN

TOXICITY DATA with REFERENCE:

orl-mus LD50:100 mg/kg FRZKAP (1),44,83
ipr-mus LD50:240 mg/kg PCJOAU 19,544,85
scu-mus LDLo:504 mg/kg PCJOAU 13,829,79

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. Moderately toxic by subcutaneous route. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.

**BEA850 CAS: 1421-23-4 HR: 3
N-BENZYLBIGUANIDE HYDROCHLORIDE**

mf: C₉H₁₃N₅•ClH mw: 227.73

SYNS: 1-BENZILBIGUANIDE CLORIDRATO (ITALIAN) □ BENZYLBIGUANIDE HYDROCHLORIDE □ 1-BENZYLBI GUANIDE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-rat LD50:481 mg/kg FRPSAX 15,521,60
ipr-rat LD50:108 mg/kg FRPSAX 15,521,60
ipr-mus LD50:195 mg/kg JAJAAA 18,196,65

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x and HCl.

**BEB000 CAS: 58050-46-7 HR: 3
BENZYL BIS(2-CHLOROETHYL)AMINO-
METHYLCARBAMATE**

mf: C₁₃H₁₈Cl₂N₂O₂ mw: 305.23

SYN: N-(BIS-(2-CHLOROETHYL)AMINOMETHYLBENZYL-URETHAN) (GERMAN)

TOXICITY DATA with REFERENCE:

ims-rat LD50:40 mg/kg ZKKOBW 84,227,75
ipr-mus LD50:50 mg/kg ZKKOBW 84,227,75

SAFETY PROFILE: Poison by intramuscular and intraperitoneal routes. See also CARBAMATES. When heated to decomposition it emits very toxic fumes of Cl and NO_x.

**BEB500 CAS: 23111-70-8 HR: 3
1-BENZYL-1,4-BIS(α-METHYLPHENETHYL)-
PIPERAZINIUM BROMIDE**

mf: C₂₉H₃₇N₂•Br mw: 493.59

TOXICITY DATA with REFERENCE:

scu-mus LD50:350 mg/kg JPETAB 97,25,49
ivn-mus LD50:29 mg/kg ARZNAD 18,1431,68

SAFETY PROFILE: Poison by subcutaneous and intravenous routes. See also BROMIDES. When heated to decomposition it emits very toxic fumes of NO_x and Br⁻.

**BEB750 CAS: 101834-51-9 HR: 3
5-BENZYL-2,2-BIS(TRIFLUOROMETHYL)-4-
METHYLOXAZOLIDINE HYDRATE**

mf: C₁₂H₁₁F₆NO•H₂O mw: 317.26

TOXICITY DATA with REFERENCE:

orl-mus LD50:200 mg/kg JMCAR 13,1215,70

ipr-mus LD50:300 mg/kg JMCAR 13,1215,70

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. See also FLUORIDES. When heated to decomposition it emits very toxic fumes of F⁻ and NO_x.

**BEC000 CAS: 100-39-0 HR: 2
BENZYL BROMIDE**

DOT: UN 1737

mf: C₇H₇Br mw: 171.05

PROP: Clear, refractive liquid; pleasant odor, lachrymator, insol in water. Mp: -4.0°, bp: 198°, d: 1.438 @ 22°/0°, vap d: 5.8.

SYNS: (BROMOMETHYL)BENZENE □ p-(BROMOMETHYL) NITROBENZENE □ BROMOPHENYLMETHANE □ ω-BROMO TOLUENE □ α-BROMOTOLUENE (DOT)

TOXICITY DATA with REFERENCE:

dns-esc 1300 μmol/L ZKKOBW 92,177,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 6.1; Label: Poison, Corrosive

SAFETY PROFILE: Intensely irritating and corrosive to skin, eyes, and mucous membranes. Large doses cause central nervous system depression. Mutation data reported. Reaction with molecular sieve produces toxic hydrogen bromide gas. See also BROMIDES.

**BEC250 CAS: 103-05-9 HR: 2
BENZYL-tert-BUTANOL**

mf: C₁₁H₁₆O mw: 164.27

PROP: Bp: 128° @ 17 mm.

SYNS: DIMETHYLPHENYLETHYL CARBINOL □ 1,1-DIMETHYL-3-PHENYLPROPANOL □ 1,1-DIMETHYL-3-PHENYL-1-PROPANOL □ α,α-DIMETHYL-Δ-PHENYLPROPYL ALCOHOL □ 2-METHYL-4-PHENYL-2-BUTANOL □ PHENYL-ETHYL DIMETHYL CARBINOL

TOXICITY DATA with REFERENCE:

orl-rat LD50:2200 mg/kg FCTXAV 12,517,74
skn-rbt LD50:3500 mg/kg FCTXAV 12,517,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. When heated to decomposition it emits acrid smoke and irritating fumes. See also ALCOHOLS.

**BEC500 CAS: 85-68-7 HR: 2
BENZYL BUTYL PHTHALATE**

mf: C₁₉H₂₀O₄ mw: 312.39

PROP: Clear, oily liquid. Mp: <-35°, bp: 370°, flash p: 390°F, d: 1.116 @ 25°/25°, vap d: 10.8.

SYNS: BBP □ 1,2-BENZENEDICARBOXYLIC ACID, BUTYL PHENYLMETHYL ESTER □ BUTYL BENZYL PHTHALATE □ n-BUTYL BENZYL PHTHALATE □ NCI-C54375 □ PALATINOL BB □ SANTICIZER 160 □ SICOL 160 □ UNIMOLL BB

TOXICITY DATA with REFERENCE:

orl-rat LD50:2330 mg/kg IARC** 29,193,82
skn-rat LD50:6700 mg/kg GISAAA 39(6),25,74
orl-mus LD50:4170 mg/kg IARC** 29,193,82
skn-mus LD50:6700 mg/kg GISAAA 39(6),25,74
ipr-mus LD50:3160 mg/kg EVHPAZ 4,3,73
orl-gpg LD50:13,750 mg/kg GTPZAB 24(3),25,80

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Inadequate Evidence IMEMDT 29,193,82; NTP Carcinogenesis Bioassay (feed); No Evidence: mouse NTPTR* NTP-TR-213,82; Clear Evidence: rat NTPTR* NTP-TR-213,82. Reported in EPA TSCA Inventory. Community Right-To-Know List.

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. Moderately toxic by ingestion, skin contact, and intraperitoneal routes. Experimental reproductive effects. See also ESTERS. Combustible when exposed to heat or flame; can react with oxidizers. To fight fire, use spray or mist, CO₂, dry chemical. When heated to decomposition it emits acrid smoke and irritating fumes.

BED000 CAS: 103-37-7 HR: 2
BENZYL *n*-BUTYRATE

mf: C₁₁H₁₄O₂ mw: 178.25

PROP: Colorless liquid; floral plum-like odor. D: 1.006, refr index: 1.492, flash p: 212°F. Sol in fixed oils; insol in glycerin, propylene glycol, water @ 239°.

SYNS: BENZYL *n*-BUTANOATE □ FEMA No. 2140

TOXICITY DATA with REFERENCE:

orl-rat LD50:2330 mg/kg FCTXAV 2,327,64

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. See also ESTERS. Combustible liquid. When heated to decomposition it emits acrid smoke and irritating fumes.

BED250 CAS: 63884-81-1 HR: 3
BENZYL CARBAMIC ESTER of 3-OXYPHENYL DIMETHYLAMINE HYDROCHLORIDE

mf: C₁₆H₁₈N₂O₂•ClH mw: 306.82

SYNS: AR-22 □ 3-(*N*-BENZYL CARBAMOYLOXY)-*N,N*-DIMETHYL-ANILINE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-mus LDLo:500 mg/kg JPETAB 43,413,31

ivn-mus LDLo:50 mg/kg JPETAB 43,413,31

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. See also ESTERS and CARBAMATES. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BED500 CAS: 64051-16-7 HR: 3
BENZYL CARBAMIC ESTER of 3-OXYPHENYL TRIMETHYLAMMONIUM METHYLSULFATE

mf: C₁₇H₂₁N₂O₂•CH₃O₄S mw: 396.50

SYNS: AMMONIUM ((3-*N*-BENZYL CARBAMOYLOXY)-PHENYL)TRIMETHYL METHYL SULFATE □ AR-23 □ *N*-BENZYL-CARBAMIC ACID-3-(TRIMETHYLAMMONIO)PHENYL-ESTER, METHYLSULFATE □ (*m*-HYDROXYPHENYL)-TRIMETHYLAMMONIUM METHYL SULFATE BENZYL-CARBAMATE

TOXICITY DATA with REFERENCE:

orl-mus LDLo:33 mg/kg JPETAB 43,413,31

ivn-mus LDLo:100 µg/kg NTIS** PB158-508

SAFETY PROFILE: Poison by ingestion and intravenous routes. See also CARBAMATES; ESTERS; and SULFATES. When heated to decomposition it emits very toxic fumes of SO_x, NH₃ and NO_x.

BED750 CAS: 14504-15-5 HR: 2
3-BENZYL-4-CARBAMOYLMETHYLSYDNONE

mf: C₁₁H₁₁N₃O₃ mw: 233.25

SYN: 3-BENZYLSYDNONE-4-ACETAMIDE

TOXICITY DATA with REFERENCE:

orl-rat LD50:4450 mg/kg GANNA2 65,273,74

SAFETY PROFILE: Mildly toxic by ingestion.

Questionable carcinogen with experimental neoplastic data. When heated to decomposition it emits toxic fumes of NO_x.

BEE250 CAS: 103-53-7 HR: 1
BENZYL CARBINYL CINNAMATE

mf: C₁₇H₁₆O₂ mw: 252.33

SYNS: PHENETHYL CINNAMATE □ β-PHENETHYL CINNAMATE □ PHENYLETHYL CINNAMATE □ β-PHENYLETHYL CINNAMATE

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD FCTXAV 16,637,78

orl-rat LD50:5 g/kg FCTXAV 16,637,78

orl-mus LD50:4500 mg/kg FCTXAV 16,637,78

orl-gpg LD50:4500 mg/kg FCTXAV 16,637,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mildly toxic by ingestion. A skin irritant. See also ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BEE375 CAS: 100-44-7 HR: 3
BENZYL CHLORIDE

DOT: UN 1738

mf: C₇H₇Cl mw: 126.59

PROP: Colorless liquid, very refractive; irritating, unpleasant odor. Mp: -48°, bp: 99° @ 62 mm, lel: 1.1%, flash p: 153°F, d: 1.11 @ 4°/4°, autoign temp: 1085°F, vap d: 4.36. IDLH 10 ppm.

SYNS: BENZILE (CLORURO di) (ITALIAN) □ BENZYL-CHLORID (GERMAN) □ BENZYLE (CHLORURE de) (FRENCH) □ CHLORO METHYLBENZENE □ CHLOROPHENYL-METHANE □ α-CHLOROTOLUENE □ ω-CHLOROTOLUENE □ α-CHLOR TOLUOL (GERMAN) □ CHLORURE de BENZYLE (FRENCH) □ NCI-C06360 □ RCRA WASTE NUMBER P028 □ TOLYL CHLORIDE

TOXICITY DATA with REFERENCE:

dnd-hmn:fbr 1 mmol/L MUREAV 145,209,85

dnd-hmn:oth 1 mmol/L MUREAV 145,209,85

otr-ham:emb 1600 µg/L CRNGDP 1,323,80

orl-rat LD50:1231 mg/kg NTIS** PB214-270

ihl-rat LC50:150 ppm/2H IARC** 11,217,76

scu-rat LD50:1 g/kg ZEKBAI 74,241,70

orl-mus LD50:1500 mg/kg 85GMAT -,25,82

ihl-mus LC50:80 ppm/2H IARC** 11,217,76

CONSENSUS REPORTS: IARC Cancer Review: Animal Limited Evidence IMEMDT 29,49,82; Animal Sufficient Evidence IMEMDT 11,217,76; Human Inadequate Evidence IMEMDT 29,49,82. EPA Genetic Toxicology Program. Community Right-To-Know List. Reported in EPA TSCA Inventory. EPA Extremely Hazardous Substances List.

OSHA PEL: TWA 1 ppm

ACGIH TLV: TWA 1 ppm; Animal Carcinogen

DFG MAK: Confirmed Human Carcinogen

NIOSH REL: (Benzyl Chloride) CL 5 mg/m³/15M
DOT CLASSIFICATION: 6.1; Label: Poison, Corrosive
SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic and tumorigenic data. Poison by inhalation. Moderately toxic by ingestion and subcutaneous routes. Experimental reproductive effects. Human mutation data reported. A corrosive irritant to skin, eyes, and mucous membranes. Flammable and moderately explosive when exposed to heat or flame. Can react vigorously with oxidizing materials. May explode during distillation. The decomposition rate can reach explosive violence in presence of metals such as iron. Catalytic impurities (e.g., aluminum, iron, rust) or sodium acetate + pyridine + iron (at 115°C) may cause violent polymerization reactions. Will react with water or steam to produce toxic and corrosive fumes. Incompatible with dimethyl sulfoxide. Used in production of drugs of abuse. When heated to decomposition it emits toxic fumes of Cl⁻. See also CHLORINATED HYDROCARBONS, AROMATIC.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Hydrocarbons, Halogenated, 1003.

BEE500 CAS: 140-18-1 HR: 2
BENZYL CHLOROACETATE

mf: C₉H₉ClO₂ mw: 184.63

PROP: Oil. Bp: 79–81° @ 0.65 mm.

SYNS: BENZYL- α -CHLOROACETATE □ BENZYL MONO-CHLOROACETATE □ CHLOROACETIC ACID BENZYL ESTER

TOXICITY DATA with REFERENCE:

ipr-mus LDLo:500 mg/kg CBCCT* 8,99,56

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by intraperitoneal route. See also ESTERS. When heated to decomposition it emits toxic fumes of Cl⁻.

BEE750 CAS: 77966-32-6 HR: 3
N-BENZYL-6'-CHLORO-2-(DIETHYLAMINO)- α -ACETOTOLUIDIDE HYDROCHLORIDE

mf: C₂₀H₂₅ClN₂O•ClH mw: 381.38

SYN: C 3136

TOXICITY DATA with REFERENCE:

eye-rbt 2% MOD ARZNAD 8,609,58

ipr-rat LD50:96 mg/kg ARZNAD 8,609,58

scu-mus LD50:360 mg/kg ARZNAD 8,609,58

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. An eye irritant. When heated to decomposition it emits very toxic fumes of NO_x, HCl, and Cl⁻.

BEE800 CAS: 1833-31-4 HR: 3
BENZYLCHLORODIMETHYLSILANE

mf: C₉H₁₃ClSi mw: 184.76

SYN: SILANE, BENZYLCHLORODIMETHYL-

TOXICITY DATA with REFERENCE:

ivn-mus LD50:56 mg/kg CSLNX* NX#04165

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits toxic vapors of Cl⁻.

BEF500 CAS: 501-53-1 HR: 3
BENZYL CHLOROFORMATE

DOT: UN 1739

mf: C₈H₇ClO₂ mw: 170.60

PROP: Colorless to pale-yellow liquid or oil; odor of phosgene. Mp: 0°, bp: 103° @ 20 mm.

SYNS: BENZYL CARBONYL CHLORIDE □ BENZYL CHLOROCARBONATE (DOT) □ BENZYL CHLOROFORMATE (DOT) □ BENZYL OXYCARBONYL CHLORIDE □ BZCF □ CARBOBENZOXY CHLORIDE □ CARBOBENZYL OXY CHLORIDE □ CHLOROFORMIC ACID BENZYL ESTER

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 8; Label: Corrosive

SAFETY PROFILE: Poison by ingestion and inhalation routes. A powerful corrosive irritant. Thermally unstable. Will react with water or steam to produce toxic and corrosive fumes and heat. Iron salts catalyze the explosive decomposition of the ester. When heated to decomposition it emits toxic fumes of Cl⁻ and phosgene. See also PHOSGENE, ESTERS, and CHLORIDES.

BEF750 CAS: 1322-48-1 HR: 3
2-BENZYL-4-CHLOROPHENOL

mf: C₁₃H₁₁ClO mw: 218.69

PROP: Nearly colorless flakes. Mp: 49°, bp: 175° @ 5 mm, d: 1.2 @ 55°/25°.

SYNS: BENZYLCHLOROPHENOL □ 4-CHLORO- α -PHENYLCRESOL

TOXICITY DATA with REFERENCE:

orl-rat LD50:1700 mg/kg JPMSAE 63,1068,74

CONSENSUS REPORTS: Chlorophenols are on the Community Right-To-Know List.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of Cl⁻. See also CHLOROPHENOLS.

BEG000 CAS: 501-68-8 HR: 2
N-BENZYL- β -CHLOROPROPANAMIDE

mf: C₁₀H₁₂ClNO mw: 197.68

PROP: Large crystals from MeOH. Mp: 94°.

SYNS: BECLAMID □ BECLAMIDE □ BEKLAMID □ BENZCHLOROPROPANAMIDE □ BENZCHLORPROPAMID □ BENZOCHLORPROPAMID □ BENZYLAMIDE □ N-BENZYL- β -CHLOROPROPIONAMIDE □ N-BENZYL-3-CHLOROPROPIONAMIDE □ CHLORACON □ CHLORAKON □ CHLOROETHYL PHENAMIDE □ 3-CHLORO-N-(PHENYLMETHYL) PROPANAMIDE □ N-(3-CHLOROPROPIONYL) BENZYLAMINE □ HIBICON □ KHLORAKON □ NEURACEN □ NIDRANE □ NYDRAN □ NYDRANE □ POSEDRAN □ POSEDRINE □ SECLAR

TOXICITY DATA with REFERENCE:

orl-rat LD50:3200 mg/kg JPETAB 107,403,53

ipr-rat LD50:770 mg/kg JPETAB 107,403,53

ivn-rat LD50:770 mg/kg 27ZQAG -,384,72

orl-mus LD50:1000 mg/kg PCJOAU 14,99,80

ipr-mus LD50:650 mg/kg 27ZQAG -,384,72

SAFETY PROFILE: Moderately toxic by ingestion, intraperitoneal and intravenous routes. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x . An anticonvulsant.

BEG300 CAS: 72850-64-7 HR: 1
BENZYL 2-CHLORO-4-(TRIFLUOROMETHYL)-5-THIAZOLECARBOXYLATE

mf: $\text{C}_{12}\text{H}_7\text{ClF}_3\text{NO}_2\text{S}$ mw: 321.71

SYNS: FLURAZOLE □ PHENYLMETHYL 2-CHLORO-4-(TRIFLUOROMETHYL)-5-THIAZOLECARBOXYLATE □ SCREEN □ 5-THIAZOLECARBOXYLIC ACID, 2-CHLORO-4-(TRIFLUOROMETHYL)-, PHENYLMETHYL ESTER

TOXICITY DATA with REFERENCE:

orl-rat LD50:5010 mg/kg 85AREA 3,123,86

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of SO_x , NO_x , F, and Cl^- .

BEG750 CAS: 103-41-3 HR: 2
BENZYL CINNAMATE

mf: $\text{C}_{16}\text{H}_{14}\text{O}_2$ mw: 238.30

PROP: Found in balsams of Peru, tolu, styrax, copaiba, and others (FCTXAV 11,1011,73). White crystals; aromatic odor. Mp: 39° , bp: 350.0° , vap press: 1 mm @ 173.8° , flash p: 212°F . Sol in fixed oils; insol in glycerin and propylene glycol.

SYNS: BENZYL ALCOHOL CINNAMIC ESTER □ BENZYL γ -PHENYLACRYLATE □ CINNAMEIN □ trans-CINNAMIC ACID BENZYL ESTER □ FEMA No. 2142 □ 3-PHENYL-2-PROPENOIC ACID PHENYLMETHYL ESTER (9CI)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg MLD FCTXAV 11,1011,73

orl-rat LDLo:5530 mg/kg FCTXAV 2,327,64

orl-gpg LD50:3760 mg/kg FCTXAV 2,327,64

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. A mild allergen and skin irritant. Combustible liquid. See also ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BEH000 CAS: 363-13-3 HR: 3
1-BENZYL-2(1H)-CYCLOHEPTIMIDAZOLONE

mf: $\text{C}_{15}\text{H}_{12}\text{N}_2\text{O}$ mw: 236.29

PROP: Pale yellow crystals from MeOH. Mp: 181° .

SYNS: BENZYL CYCLOHEPTIMIDAZOL-2(1H)-ONE □ 1-(PHENYLMETHYL)-2(1H)-CYCLOHEPTIMIDAZOLONE

TOXICITY DATA with REFERENCE:

orl-mus LD50:358 mg/kg ARZNAD 18,939,68

ipr-mus LD50:119 mg/kg ARZNAD 18,939,68

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x .

BEH250 CAS: 40502-72-5 HR: 3
 β -BENZYL- α -CYCLOPENTYL-4-METHYL- α -PHENYL-1-PIPERAZINEPROPANOL DIHYDROCHLORIDE

mf: $\text{C}_{26}\text{H}_{36}\text{N}_2\text{O} \cdot 2\text{ClH}$ mw: 465.56

TOXICITY DATA with REFERENCE:

orl-mus LD50:2000 mg/kg CHTPBA 7,293,72

ipr-mus LD50:207 mg/kg EJMCA5 9,408,74

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BEI000 CAS: 5372-17-8 HR: 3
1-BENZYL-5-(2-(DIETHYLAMINO)ETHOXY)-3-METHYLPYRAZOLE

mf: $\text{C}_{17}\text{H}_{25}\text{N}_3\text{O}$ mw: 287.45

SYN: B-314

TOXICITY DATA with REFERENCE:

orl-mus LD50:385 mg/kg ARZNAD 17,214,67

scu-mus LD50:262 mg/kg ARZNAD 17,214,67

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x .

BEI250 CAS: 101651-55-2 HR: 3
2-(BENZYL(2-(DIETHYLAMINO)ETHYL)-AMINO)ACETANILIDE DIHYDROCHLORIDE

mf: $\text{C}_{21}\text{H}_{29}\text{N}_3\text{O} \cdot 2\text{ClH}$ mw: 412.45

SYN: C 5348

TOXICITY DATA with REFERENCE:

eye-rbt 2% MLD ARZNAD 9,167,59

scu-mus LD50:375 mg/kg ARZNAD 9,167,59

SAFETY PROFILE: Poison by subcutaneous route. An eye irritant. When heated to decomposition it emits very toxic fumes of HCl and NO_x .

BEI500 CAS: 102489-46-3 HR: 3
2-(BENZYL(2-(DIETHYLAMINO)ETHYL)AMINO)-o-ACETOTOLUIDIDE DIHYDROCHLORIDE

mf: $\text{C}_{22}\text{H}_{31}\text{N}_3\text{O} \cdot 2\text{ClH}$ mw: 426.48

SYN: C 5351

TOXICITY DATA with REFERENCE:

eye-rbt 2% MLD ARZNAD 9,167,59

scu-mus LD50:160 mg/kg ARZNAD 9,167,59

SAFETY PROFILE: Poison by subcutaneous route. An eye irritant. When heated to decomposition it emits very toxic fumes of NO_x and HCl. See also AMINES.

BEI750 CAS: 102489-45-2 HR: 3
2-(BENZYL(2-(DIETHYLAMINO)ETHYL)AMINO)-6'-CHLORO-o-ACETOTOLUIDIDE DIHYDROCHLORIDE

mf: $\text{C}_{22}\text{H}_{30}\text{ClN}_3\text{O} \cdot 2\text{ClH}$ mw: 460.92

SYN: C 5296

TOXICITY DATA with REFERENCE:

eye-rbt 2% MLD ARZNAD 9,167,59

scu-mus LD50:32 mg/kg ARZNAD 9,167,59

SAFETY PROFILE: Poison by subcutaneous route. An eye irritant. When heated to decomposition it emits very toxic fumes of NO_x , HCl, and Cl^- .

BEJ250 CAS: 77966-34-8 HR: 3
(2-(BENZYL(3-DIETHYLAMINO)PROPYL)-AMINO)-o-ACETOTOLUIDIDE DIHYDROCHLORIDE

mf: $C_{23}H_{33}N_3O \cdot 2ClH$ mw: 440.51

SYN: C 5353

TOXICITY DATA with REFERENCE:

eye-rbt 2% MLD ARZNAD 9,167,59

scu-mus LD50:260 mg/kg ARZNAD 9,167,59

SAFETY PROFILE: Poison by subcutaneous route. An eye irritant. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BEJ500 CAS: 77966-75-7 HR: 3
2-(BENZYL(3-(DIETHYLAMINO)PROPYL)-AMINO)-2',6'-ACETOXYLIDIDE DIHYDROCHLORIDE

mf: $C_{24}H_{35}N_3O \cdot 2ClH$ mw: 454.54

SYN: C 5354

TOXICITY DATA with REFERENCE:

eye-rbt 2% MLD ARZNAD 9,167,59

scu-mus LD50:35 mg/kg ARZNAD 9,167,59

SAFETY PROFILE: Poison by subcutaneous route. An eye irritant. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BEJ825 HR: 3
N-BENZYL-N',N'-DIETHYL-N-1-NAPHTHYL ETHYLENEDIAMINE

mf: $C_{23}H_{28}N_2$ mw: 332.53**TOXICITY DATA with REFERENCE:**

ipr-rat LDLo:45 mg/kg BJPCAL 11,1,56

ipr-mus LD50:63 mg/kg BJPCAL 11,1,56

scu-mus LD50:300 mg/kg BJPCAL 11,1,56

SAFETY PROFILE: Poison by subcutaneous and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x . See also AMINES.

BEJ830 HR: 3
N-BENZYL-N',N'-DIETHYL-N-2-NAPHTHYL ETHYLENEDIAMINE

mf: $C_{23}H_{28}N_2$ mw: 332.53**TOXICITY DATA with REFERENCE:**

ipr-rat LDLo:90 mg/kg BJPCAL 11,1,56

ipr-mus LD50:128 mg/kg BJPCAL 11,1,56

scu-mus LD50:459 mg/kg BJPCAL 11,1,56

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by subcutaneous route. When heated to decomposition it emits toxic fumes of NO_x . See also AMINES.

BEK250 CAS: 32871-90-2 HR: 3
4-BENZYL-6,7-DIMETHOXYISOQUINOLINE HYDROBROMIDE

mf: $C_{18}H_{17}NO_2 \cdot BrH$ mw: 360.28**TOXICITY DATA with REFERENCE:**

orl-mus LD50:2300 mg/kg CHTPBA 6,358,71

ipr-mus LD50:400 mg/kg EJMCA5 11,271,76

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x and HBr.

BEK500 CAS: 15565-25-0 HR: 3
4-BENZYL-I-(3,4-DIMETHOXYPHENETHYL)-PIPERIDINE HYDROCHLORIDE

mf: $C_{22}H_{29}NO_2 \cdot ClH$ mw: 375.98**TOXICITY DATA with REFERENCE:**

orl-mus LD50:200 mg/kg ARZNAD 17,1145,67

ivn-mus LD50:20 mg/kg ARZNAD 17,1145,67

SAFETY PROFILE: Poison by ingestion and intravenous routes. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BEL500 CAS: 15090-13-8 HR: 3
1-BENZYL-5-(3-(DIMETHYLAMINO)PROPOXY)-3-METHYLPYRAZOLE

mf: $C_{16}H_{23}N_3O$ mw: 273.42

SYN: B-329

TOXICITY DATA with REFERENCE:

orl-mus LD50:339 mg/kg ARZNAD 17,214,67

scu-mus LD50:197 mg/kg ARZNAD 17,214,67

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x .

BEL525 CAS: 7083-24-1 HR: 3
BENZYL 1-(2-(DIMETHYLAMINO)PROPYL)-PYRROL-2-YL, CITRATE KETONE

mf: $C_{17}H_{22}N_2O \cdot C_6H_8O_7$ mw: 462.55

SYN: 1-(2-(DIMETHYLAMINO)PROPYL)-2-(PHENYLACETYL) PYRROLE CITRATE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:40 mg/kg CHTPBA 1,127,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: A poison by intravenous route. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.

BEL550 CAS: 73747-22-5 HR: 3
BENZYL DIMETHYLAMMONIUM HEXAFLUORO ARSENATE

mf: $C_9H_{13}N \cdot AsF_6H$ mw: 325.16

SYNS: BENZYLAMINE, N,N-DIMETHYL-, HEXAFLUORO ARSENATE (1-) □ N,N-DIMETHYLBENZYLAMINE HEXAFLUOROARSENATE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:180 mg/kg CSLNX* NX#04251

OSHA PEL: TWA 0.5 mg(As)/m³

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits toxic fumes of NO_x , F⁻, and As.

BEL750 CAS: 151-05-3 HR: 2
BENZYL DIMETHYL CARBINYL ACETATE

mf: $C_{12}H_{16}O_2$ mw: 192.28**PROP:** Bp: 102–103° @ 10 mm.

SYNS: DIMETHYLBENZYL CARBINOLACETATE □ α,α-DIMETHYLPHENETHYL ACETATE □ α,α-DIMETHYLPHENETHYL ALCOHOL ACETATE □ DMBCA

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MOD FCTXAV 12,533,74

orl-rat LD50:3300 mg/kg FCTXAV 12,533,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. A skin irritant. When heated to decomposition it emits acrid smoke and irritating fumes. See also ALCOHOLS.

BEL850 CAS: 10094-34-5 HR: 1
BENZYL DIMETHYLCARBINYL *n*-BUTYRATE

mf: $C_{14}H_{20}O_2$ mw: 220.34

PROP: Colorless liquid with plum aroma. Mp: $>70^\circ$.

SYNS: BENZYL DIMETHYLCARBINYL BUTYRATE □ BUTYRIC ACID, α - α -DIMETHYLPHENETHYL ESTER □ DIMETHYL BENZYL CARBINYL BUTYRATE □ α - α -DIMETHYLPHENETHYL BUTYRATE

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MOD FCTXAV 18,667,80

orl-rat LD50: >5 g/kg FCTXAV 18,667,80

skn-rbt LD50: >5 g/kg FCTXAV 18,667,80

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low oral toxicity. A skin irritant. When heated to decomposition it emits acrid smoke and irritating fumes.

BEL900 CAS: 122-18-9 HR: 2
BENZYL DIMETHYLCETYLAMMONIUM CHLORIDE

mf: $C_{25}H_{46}N \cdot Cl$ mw: 396.17

SYNS: ACINOL □ AMMONIUM, BENZYLHEXADECYL DIMETHYL-, CHLORIDE □ AMMONYX G □ AMMONYX T □ BAKTONIUM □ BANICOL □ BENZALETAS □ BENZENEME THANAMINIUM, N-HEXADECYL-N,N-DIMETHYL-, CHLORIDE □ BENZYL DIMETHYLHEXADECYLAMMONIUM CHLORIDE □ BICETONIUM □ BONJELA □ CDBAC □ CETALKONIUM CHLORIDE □ CETOL □ CETYLON □ CETYL ZEPHIRAN □ DEHYQUART CBB □ DEHYQUART CDB □ DMCBAC □ PHARYCIDIN CONCENTRATE □ RODALON □ SPILAN □ TETRASEPTAN □ WIN 357 □ WINZER SOLUTION □ ZETTYN CHLORIDE

TOXICITY DATA with REFERENCE:

eye-rbt 150 mg MLD ARZNAD 9,349,59

eye-gpg 500 mg MOD ARZNAD 9,349,59

orl-rat LD: >500 mg/kg NCNSA6 5,39,53

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. An eye irritant. When heated to decomposition it emits toxic vapors of NO_x and Cl^- .

BEM000 CAS: 139-07-1 HR: 3
BENZYL DIMETHYLDODECYLAMMONIUM CHLORIDE

mf: $C_{21}H_{38}N \cdot Cl$ mw: 340.05

PROP: Solid. Mp: $31-32^\circ$.

SYN: DODECYL DIMETHYL BENZYLAMMONIUM CHLORIDE

TOXICITY DATA with REFERENCE:

skn-rbt 1 mg/24H OYYAA2 6,329,72

eye-rbt 1 mg OYYAA2 6,329,72

orl-rat LD50:400 mg/kg 85JCAE -,490,86

ipr-rat LD50:100 mg/kg 85JCAE -,490,86

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. A skin and eye irritant. When heated to decomposition it emits very toxic fumes of NO_x , NH_3 , and Cl^- .

BEM250 CAS: 37557-89-4 HR: 1
BENZYL DIMETHYLEICOSANYLAMMONIUM CHLORIDE

mf: $C_{29}H_{54}N \cdot Cl$ mw: 452.29

SYN: EICOSANYL DIMETHYL BENZYLAMMONIUM CHLORIDE

TOXICITY DATA with REFERENCE:

skn-rbt 1 mg/24H OYYAA2 6(2),329,72

eye-rbt 1 mg OYYAA2 6(2),329,72

SAFETY PROFILE: A skin and eye irritant. When heated to decomposition it emits very toxic fumes of NH_3 , NO_x , and Cl^- .

BEM325 HR: 3
N-BENZYL-N',N'-DIMETHYL-N-1-NAPHTHYL ETHYLENEDIAMINE

mf: $C_{21}H_{24}N_2$ mw: 304.47

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:90 mg/kg BJPCAL 11,1,56

ipr-mus LD50:135 mg/kg BJPCAL 11,1,56

scu-mus LD50:463 mg/kg BJPCAL 11,1,56

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by subcutaneous route. When heated to decomposition it emits toxic fumes of NO_x . See also AMINES.

BEM330 HR: 3
N-BENZYL-N',N'-DIMETHYL-N-2-NAPHTHYL ETHYLENEDIAMINE

mf: $C_{21}H_{24}N_2$ mw: 304.47

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:135 mg/kg BJPCAL 11,1,56

ipr-mus LD50:265 mg/kg BJPCAL 11,1,56

scu-mus LD50:740 mg/kg BJPCAL 11,1,56

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by subcutaneous route. When heated to decomposition it emits toxic fumes of NO_x . See also AMINES.

BEM400 CAS: 124088-59-1 HR: 2
BENZYL DIMETHYLOCTADECYL AMMONIUM 3-NITROBENZENESULFONATE

mf: $C_{27}H_{50}N \cdot C_6H_4NO_3S$ mw: 590.95

SYNS: AMMONIUM, BENZYL DIMETHYLOCTADECYL-, 3-NITROBENZENESULFONATE □ BENZENEMETHANAMINIUM, N,N-DIMETHYL-N-OCTADECYL-, SALT WITH 3-NITRO BENZENESULFONIC ACID (1:1) □ N,N-DIMETHYL-N-OCTADECYLBENZENEMETHANAMINIUM SALT WITH 3-NITRO BENZENESULFONIC ACID (1:1)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg MLD NTIS** OTS0570937

eye-rbt 100 mg SEV NTIS** OTS0570937

orl-rat LD50:2679 mg/kg NTIS** OTS0570937

skn-rat LD50: >2 g/kg NTIS** OTS0570937

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. A severe eye and mild skin irritant. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BEM500 CAS: 961-71-7 HR: 3
N-BENZYL-N',N'-DIMETHYL-N-PHENYLETHYLENEDIAMINE

mf: C₁₇H₂₂N₂ mw: 254.41

PROP: Pale-yellow oil. Bp: 179–180° @ 7 mm.

SYNS: ANTERGAN □ BRIDAL □ DIMETINA □ N,N-DIMETHYL-N'-PHENYL-N'-(PHENYLMETHYL)-1,2-ETHANE DIAMINE (9CI) □ LERGITIN □ NCI-C60719 □ PHENBENZAMINE □ PM245 □ 2339 RP

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:120 mg/kg BJPCAL 11,1,56
ims-rat LDLo:350 mg/kg FRPSAX 13,3,58
ipr-mus LD50:170 mg/kg FRPSAX 13,3,58
scu-mus LD50:400 mg/kg BJPCAL 11,1,56

SAFETY PROFILE: Poison by subcutaneous, intraperitoneal, and intramuscular routes. When heated to decomposition it emits toxic fumes of NO_x.

BEM750 CAS: 525-02-0 HR: 3 1-BENZYL-2,5-DIMETHYL SEROTONIN HYDROCHLORIDE

mf: C₁₉H₂₂N₂O•ClH mw: 330.89

PROP: Solid. Mp: 230–231°.

SYNS: 3-(2-AMINOETHYL)-1-BENZYL-5-METHOXY-2-METHYLINDOLE HYDROCHLORIDE □ BAS □ BENANSERIN HYDROCHLORIDE □ BENZYL ANTISEROTONIN □ 1-BENZYL-2-METHYL-3-(2-AMINOETHYL)-5-METHOXYINDOLE HYDROCHLORIDE □ 1-BENZYL-2-METHYL-5-METHOXY TRYPTAMINE HYDROCHLORIDE □ SEROTONIN BENZYL ANALOG □ WOOLLEY'S ANTISEROTONIN

TOXICITY DATA with REFERENCE:

ipr-mus LD50:250 mg/kg JMCAR 9,819,66

SAFETY PROFILE: Poison by intraperitoneal route. A serotonin antagonist that causes psychotropic effects in humans. Experimental reproductive effects. When heated to decomposition it emits very toxic fumes of HCl and NO_x.

BEN000 CAS: 121-54-0 HR: 3 BENZYL DIMETHYL(2-(2-(p-(1,1,3,3-TETRA- METHYLBUTYL)PHENOXY)ETHOXY)ETHYL) AMMONIUM CHLORIDE

mf: C₂₇H₄₂NO₂•Cl mw: 448.15

PROP: Colorless crystals or plates. Mp: 164–166°. Very sol in H₂O; sol in Me₂CO, EtOH, and CHCl₃.

SYNS: ANTI-GERM 77 □ ANTISEPTOL □ BENZETHONIUM CHLORIDE □ BENZETONIUM CHLORIDE □ BENZYLDI METHYL-p-(1,1,3,3-TETRAMETHYLBUTYL)PHENOXYETHOXY-ETHYLAMMONIUM CHLORIDE □ BZT □ DIAPP □ DIISOBUTYL PHENOXYETHOXYETHYLDIMETHYL BENZYL AMMONIUM CHLORIDE □ DISILYN □ HYAMINE □ HYAMINE 1622 □ NCI-C61494 □ p-tert-OCTYLPHENOXYETHOXY-ETHYLDIMETHYL BENZYL AMMONIUM CHLORIDE □ PHEMERIDE □ PHEMEROL CHLORIDE □ PHEMITHYN □ POLYMIINE D □ QUATRACHLOR □ SOLAMINE

TOXICITY DATA with REFERENCE:

eye-rbt 30 µg SEV PSTGAW 20,16,53
dnr-esc 1500 ng/well MUREAV 133,161,84
sce-ham:emb 1 mg/L SHIGAZ 74,1365,87
orl-rat LD50:368 mg/kg PSEBAA 120,511,65
ipr-rat LD50:16,500 µg/kg FSDZD4 9,729,83
scu-rat LD50:119 mg/kg NTIS** PB195-158
ivn-rat LD50:19 mg/kg SCHSAV 30,147,54
unr-rat LD50:420 mg/kg MEIEDD 10,152,83
orl-mus LD50:338 mg/kg PSEBAA 120,511,65
ipr-mus LD50:15,500 µg/kg FSDZD4 9,729,83

ivn-mus LD50:30 mg/kg JAPMA8 40,267,51

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, subcutaneous, intraperitoneal, and intravenous routes. A severe eye irritant. Questionable carcinogen with experimental neoplastigenic data. Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻, NH₃, and NO_x. A topical anti-infective agent.

BEN250 CAS: 101-49-5 HR: 2 2-BENZYL DIOXOLAN

mf: C₁₀H₁₂O₂ mw: 164.22

SYN: PHENYLACETALDEHYDE ETHYLENEGLYCOL ACETAL

TOXICITY DATA with REFERENCE:

orl-rat LD50:2200 mg/kg FCTXAV 14,827,76
skn-rbt LD50:2600 mg/kg FCTXAV 14,827,76

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. When heated to decomposition it emits acrid smoke and irritating fumes. See also ALDEHYDES.

BEN260 CAS: 219905-91-6 HR: 3 4-(BENZYL-(2-((2,5-DIPHENYLOXAZOLE-4- CARBONYL)AMINO)ETHYL)CARBAMOYL)- 2-DECANOYLAMINO BUTYRIC ACID

mf: C₄₀H₄₈N₄O₆ mw: 680.84

SYN: GLUTAMINE, N-(2-((2,5-DIPHENYL-4-OXAZOLYL)CARBONYL)AMINO)ETHYL)-N²-(1-OXODECYL)-N-(PHENYLMETHYL)-

TOXICITY DATA with REFERENCE:

ipr-mus TDLo:35 mg/kg JPETAB 292,530,2000

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x.

BEN750 CAS: 15090-16-1 HR: 3 1-BENZYL-5-(3-(DIPROPYLAMINO)PROPOXY)- 3-METHYLPYRAZOLE

mf: C₂₀H₃₁N₃O mw: 329.54

SYN: B-331

TOXICITY DATA with REFERENCE:

orl-mus LD50:376 mg/kg ARZNAD 17,214,67
scu-mus LD50:280 mg/kg ARZNAD 17,214,67

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.

BEN800 CAS: 7492-37-7 HR: 3 1-BENZYL DIPROPYL KETONE

mf: C₁₄H₂₀O mw: 204.34

SYNS: 3-BENZYL-4-HEPTANONE □ 4-HEPTANONE, 3-BENZYL-(8CI) □ 4-HEPTANONE, 3-(PHENYLMETHYL)-

TOXICITY DATA with REFERENCE:

orl-rat LD50:4400 mg/kg JACTDZ 1,2,90

DOT CLASSIFICATION: 3; Label: Flammable Liquid
SAFETY PROFILE: Low toxicity by ingestion. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.

**BEO000 CAS: 7281-04-1 HR: 3
BENZYLDODECYLDIMETHYL AMMONIUM
BROMIDE**mf: $C_{21}H_{38}N^+Br^-$ mw: 384.51**PROP:** Crystals Mp: 47°. Sol in H_2O .**SYNS:** AMMONYL BR 1244 □ BACFOR BL □ BENZALKONIUM BROMIDE □ BENZENEMETHANAMINIUM, N-DODECYL-N,N-DIMETHYL-, BROMIDE (9CI) □ BENZODODECINIUM BROMIDE □ BENZYLDMETHYLDODECYLAMMONIUM BROMIDE □ BROMEK DWUMETYLOLAURYLOBENZYL-AMONIOWY □ DIMETHYL LAURYL BENZENE AMMONIUM BROMIDE □ N-DODECYL-N,N-DIMETHYLBENZENE-METHANAMINIUM BROMIDE □ SINNOQUAT BL 80 □ SINNOQUAT BL 95 □ STERINOL □ STERINOLU (POLISH)**TOXICITY DATA with REFERENCE:**

orl-rat LD50:250 mg/kg RPZHAW 17,543,66

ipr-rat LD50:90 mg/kg BCTKAG 7,161,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by ingestion and intraperitoneal routes. See also BROMIDES. When heated to decomposition it emits very toxic fumes of NH_3 , NO_x , and Br^- .**BEO250 CAS: 103-50-4 HR: 2
BENZYL ETHER**mf: $C_{14}H_{14}O$ mw: 198.28**PROP:** Colorless to pale-yellow liquid. Mp: 5°, bp: 182–183° @ 22 mm, flash p: 275°F (CC), d: 1.056, vap d: 6.84, refr index: 1.557.**SYNS:** BENZYL OXIDE (CZECH) □ DIBENZYLETHER (CZECH) □ FEMA No. 2371**TOXICITY DATA with REFERENCE:**

skn-rbt 500 mg/24H MLD 28ZPAK -,38,72

eye-rbt 500 mg/24H MLD 28ZPAK -,38,72

orl-rat LD50:2500 mg/kg FCTXAV 16,637,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Moderately toxic by ingestion. Vapors are probably narcotic in high concentration. A skin and eye irritant. Combustible when exposed to heat or flame; can react with oxidizing materials. Moderate explosion hazard by spontaneous chemical reaction. To fight fire, use CO_2 , dry chemical. See also ETHERS.**BEO500 CAS: 39002-10-3 HR: 3
1-BENZYL-4-ETHYNYL-3-(1-(3-
INDOLYL)ETHYL)-4-PIPERIDINOL**mf: $C_{24}H_{26}N_2O$ mw: 358.52**SYNS:** N-BENZYL 3-(α -(3'-INDOLYL)ETHYL)-4-HYDROXY-4-ETHYNYLPIPERIDINE □ ICIG 778 □ 4-PIPERIDINOL, 1-BENZYL-4-ETHYNYL-3-(1-(3-INDOLYL)ETHYL)- □ 4-PIPERIDINOL, 4-ETHYNYL-3-(1-(1H-INDOL-3-YL)ETHYL)-1-(PHENYLMETHYL)-**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:160 mg/kg BIMDB3 21,101,74

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x .**BEP250 CAS: 104-57-4 HR: 2
BENZYL FORMATE**mf: $C_8H_8O_2$ mw: 136.16**PROP:** Colorless liquid with powerful fruity, spicy odor. D: 1.083–1.092, bp: 202°. Insol in water.**SYNS:** BENZYL ALCOHOL FORMATE □ BENZYL METHANOATE**TOXICITY DATA with REFERENCE:**

dnr-bcs 22 mg/disc OIGZSE 34,267,85

orl-rat LD50:1400 mg/kg FCTXAV 11,1019,73

skn-rbt LD50:2000 mg/kg FCTXAV 11,1019,73

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Moderately toxic by ingestion and skin contact. Mutation data reported. Probably narcotic in high concentrations. See also ESTERS. When heated to decomposition it emits acrid, irritating fumes.**BEP500 CAS: 10453-86-8 HR: 3
5-BENZYL-3-FURYL METHYL(±)-cis,trans-
CHRYSANTHEMATE**mf: $C_{22}H_{26}O_3$ mw: 338.48**SYNS:** BENZOFUROLINE □ BENZYLFUROLINE □ (5-BENZYL-3-FURYL) METHYL-2,2-DIMETHYL-3-(2-METHYLPROPENYL)-CYCLOPROPANECARBOXYLATE □ CHRYSON □ CHRYSRON □ DIMETHYL-3-(2-METHYL-1-PROPENYL)CYCLOPROPANE CARBOXYLATE □ ENT 27,474 □ FMC 17370 □ FOR-SYN □ NIA 17170 □ NRDC 104 □ NSC-195022 □ OMS-1206 □ PREMARD □ PYNOSECT □ PYRETHERM □ RESMETHRIN □ RESMETRINA (PORTUGUESE) □ SBP-1382 □ S.B. PENICK 1382 □ SYNTHRIN**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1244 mg/kg FAATDF 7,299,86

ihl-rat LC: >420 mg/ $m^3/4H$ NTIS** AD747-345

skn-rat LD50:4200 mg/kg 85JFAN A362,83

ipr-rat LDLo:19,200 mg/kg NTIS** AD747-345

scu-rat LD50: >5 g/kg BOCKAE 34,157,69

ivn-rat LDLo:160 mg/kg BIOGAL 41(10),283,75

orl-mus LD50:300 mg/kg ABCHA6 37,2681,73

skn-mus LD50: >5 g/kg BOCKAE 34,157,69ipr-mus LD50: >1 g/kg OYYAA2 3,325,69scu-mus LD50: >2 g/kg BOCKAE 34,157,69ihl-dog LC: >420 mg/ $m^3/4H$ NTIS** AD747-345

ivn-dog LDLo:250 mg/kg NTIS** AD747-345

skn-rbt LD50:2500 mg/kg SPEADM 78-1,9,78

CONSENSUS REPORTS: EPA FIFRA 1988 pesticide subject to registration or re-registration. EPA Genetic Toxicology Program.**SAFETY PROFILE:** Poison by ingestion, and intravenous routes. Moderately toxic by inhalation and skin contact. When heated to decomposition it emits acrid and irritating fumes. See also ESTERS.**BEP750 CAS: 28434-01-7 HR: 3
5-BENZYL-3-FURYL METHYL(+)-trans-
CHRYSANTHEMATE**mf: $C_{22}H_{26}O_3$ mw: 338.48**PROP:** Bp: 174° @ 0.0008 mm.**SYNS:** BIORESMETHRIN □ BIORESMETHRINE □ BIORESMETRINA (PORTUGUESE) □ NIA-18739 □ NRDC 107 □ (+)-trans-RESMETHRIN □ d-trans-RESMETHRIN □ RU-11484 □ SBP-1390**TOXICITY DATA with REFERENCE:**

ivn-rat LD50:340 mg/kg BIOGAL 41,283,75

orl-mus LD50:590 mg/kg EVHPAZ 14,15,76

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating fumes. A pesticide. See also ESTERS.

BEP600 CAS: 51628-36-5 HR: 2
5'-BENZYL-3'-FURYL METHYL α -ETHYL-PHENYLACETATE

mf: C₂₂H₂₂O₃ mw: 334.44

SYNS: BENZENEACETIC ACID, α -ETHYL-, (5-(PHENYL METHYL)-3-FURANYL) METHYL ESTER \square (5-(PHENYL METHYL)-3-FURANYL) METHYL α -ETHYL BENZENEACETATE

TOXICITY DATA with REFERENCE:

orl-mus LD50:>1 g/kg USXXAM #4062968

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BEP650 CAS: 51628-56-9 HR: 2
5'-BENZYL-3'-FURYL METHYL α -ISOPROPYL-4-METHOXYPHENYL ACETATE

mf: C₂₄H₂₆O₄ mw: 378.50

SYNS: BENZENEACETIC ACID, 4-METHOXY- α -(1-METHYL ETHYL)-, (5-(PHENYL METHYL)-3-FURANYL) METHYL ESTER \square (5-(PHENYL METHYL)-3-FURANYL) METHYL-4-METHOXY- α -(1-METHYLETHYL) BENZENEACETATE

TOXICITY DATA with REFERENCE:

orl-mus LD50:900 mg/kg USXXAM #4062968

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BEP670 CAS: 14618-80-5 HR: D
(R)- α -BENZYLGLYCIDOL

mf: C₁₀H₁₂O₂ mw: 164.22

SYNS: OXIRANE, ((PHENYLMETHOXY)METHYL)-, (R)- \square (S)-1-(BENZYLOXY)-2,3-EPOXYPROPANE \square (R)-(-)-BENZYLOXY METHYLOXIRANE \square PROPANE, 1-(BENZYLOXY)-2,3-EPOXY-, (S)- \square PROPANE, 1-(BENZYLOXY)-2,3-EPOXY-, (R)-

TOXICITY DATA with REFERENCE:

mic-sat 660 nmol/plate MUREAV 298,197,1993

uns-ipr-mus 100 mg/kg MUREAV 298,197,1993

cyt-ipr-mus 100 mg/kg MUREAV 298,197,1993

sce-ipr-mus 100 mg/kg MUREAV 298,197,1993

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BEQ000 CAS: 555-96-4 HR: 3
BENZYLHYDRAZINE

mf: C₇H₁₀N₂ mw: 122.19

PROP: Liquid. Bp: 107° @ 8 mm.

TOXICITY DATA with REFERENCE:

oms-bcs 10 mmol/L MUREAV 5,343,68

ipr-mus LD50:75 mg/kg THERAP 22,367,67

scu-mus LD50:68 mg/kg ANYAA9 80,568,59

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. Mutation data reported. When heated to decomposition it emits toxic fumes such as NO_x.

BEQ250 CAS: 20570-96-1 HR: 2
BENZYLHYDRAZINE DIHYDROCHLORIDE

mf: C₇H₁₀N₂•2ClH mw: 195.11

PROP: Solid. Mp: 145° (decomp).

TOXICITY DATA with REFERENCE:

ipr-mus LD50:11 mg/kg JMCAR 18,20,75

SAFETY PROFILE: Poison by intraperitoneal route. Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits very toxic fumes of HCl and NO_x.

BEQ500 CAS: 1073-62-7 HR: 3
BENZYLHYDRAZINE HYDROCHLORIDE

mf: C₇H₁₀N₂•ClH mw: 158.65

PROP: Leaflets from EtOH. Mp: 111°.

SYNS: P 1297 \square USAF EL-54 \square Z 102

TOXICITY DATA with REFERENCE:

orl-mus LD50:90 mg/kg JPCAS 5,221,62

ipr-mus LD50:50 mg/kg NTIS** AD277-689

SAFETY PROFILE: Poison by ingestion and intraperitoneal route. When heated to decomposition it emits very toxic fumes of NO_x and Cl⁻.

BEQ625 CAS: 73-48-3 HR: 3
BENZYLHYDROFLUMETHIAZIDE

mf: C₁₅H₁₄F₃N₃O₄S₂ mw: 421.44

PROP: Crystals from MeOH/CHCl₃. Mp: 228°. Insol in water, chloroform, benzene, and ether; sol in acetone and alc.

SYNS: APRINOX \square Be 724-A \square BENDROFLUAZIDE \square BENDROFLUMETHIAZIDE \square BENTRIDE \square BENURON \square BENZYDROFLUMETHIAZIDE \square 3-BENZYL-3,4-DIHYDRO-6-(TRIFLUOROMETHYL)-2H-1,2,4-BENZOTHIADIAZINE-7-SULFONAMIDE 1,1-DIOXIDE \square BENZYLRODIURAN \square 3-BENZYL-6-TRIFLUOROMETHYL-7-SULFAMOYL-3,4-DIHYDRO-1,2,4-BENZOTHIADIAZINE-1,1-DIOXIDE \square BERKOZIDE \square BHFT \square BL H368 \square BRISTURIC \square BRISTURON \square CENTYL \square FLUMESIL \square FT 8 \square INTOLEX \square NATERETIN \square NATURETIN \square NATURINE \square NEO-NACLEX \square NEO-RONTYL \square NIAGARIL \square NIKION \square ORSILE \square PLURYL \square PLURYLE \square PLUSURIL \square POLIURON \square RELAN BETA \square REPICIN \square SALURAL \square SALURES \square SINESALIN \square SODIURETIC \square THIAZIPIDICO \square 6-TRI FLUOROMETHYL-3-BENZYL-7-SULFAMYL-3,4-DIHYDRO-1,2,4-BENZOTHIADIAZINE-1,1-DIOXIDE \square URLEA

TOXICITY DATA with REFERENCE:

cyt-ham:lng 200 mg/L GMCRC 27,95,81

orl-wmn TDLo:3 mg/kg:CNS LANCAO 1,564,82

ipr-mus LD50:4800 mg/kg AEPPAE 238,435,60

ivn-mus LD50:395 mg/kg JPETAB 134,273,61

SAFETY PROFILE: Poison by intravenous route. Human systemic effects by ingestion: convulsions and somnolence. Mutation data reported. When heated to decomposition it emits toxic fumes of F⁻, SO_x, and NO_x.

BER500 CAS: 3268-19-7 HR: 3
4,6-*o*-BENZYLIDENE- β -D-GLUCOPYRANOSIDE PODOPHYLLOTOXIN

mf: C₃₅H₃₆O₁₃ mw: 664.71

SYNS: NSC-42076 \square PODOPHYLLOTOXIN-BENZILIDEN-GLUCOSID (GERMAN) \square PODOPHYLLOTOXIN- α -BENXYLI DENE- β -D-GLUCOPYRANOSIDE \square PRORESIDOR \square SP G \square SPG 827

TOXICITY DATA with REFERENCE:

orl-mus LD50:280 mg/kg ARZNAD 11,549,61
 ipr-mus LD50:280 mg/kg ARZNAD 11,549,61

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits acrid smoke and irritating fumes.

BES250 CAS: 2782-70-9 HR: 3
BENZYLIDENEMETHYLPHOSPHORO-DITHIOATE

mf: $C_{11}H_{18}O_4P_2S_4$ mw: 404.47

SYNS: S,S'-BENZYLIDENE BIS(O,O-DIMETHYL PHOSPHORO DITHIOATE) □ ENT 25,739 □ SD 7438 □ SHELL SD 7,438 □ TOLUENE- α,α -DITHIOL BIS(O,O-DIMETHYL PHOSPHORO DITHIOATE)

TOXICITY DATA with REFERENCE:

orl-rat LD50:280 mg/kg 28ZEAL 4,371,69
 orl-mus LD50:176 mg/kg ARSIM* 20,19,66
 skn-rbt LD50:2500 mg/kg BESAAT 12,161,66
 orl-ckn LD50:5096 mg/kg TXAPA9 11,49,67

SAFETY PROFILE: Poison by ingestion. Moderately toxic by skin contact. When heated to decomposition it emits very toxic fumes of PO_x and SO_x . A pesticide. See also ESTERS.

BES300 CAS: 52098-16-5 HR: 3
1-BENZYL-2-INDOLYL HYDROXYMETHYL KETONE

mf: $C_{17}H_{15}NO_2$ mw: 265.33

SYNS: 1-BENZYL-2-(HYDROXYACETYL)INDOLE □ KETONE, 1-BENZYL-2-INDOLYL HYDROXYMETHYL-

TOXICITY DATA with REFERENCE:

ipr-mus LD50:350 mg/kg PCJOAU 8,74,74

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: A poison by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x .

BES500 CAS: 122-73-6 HR: 1
BENZYL ISOAMYL ETHER

mf: $C_{12}H_{18}O$ mw: 178.30

PROP: Liquid or oil. Bp: 235°, d: 0.965 @ 15.5°/15.5°.

SYNS: BENZYL ISOPENTYL ETHER □ ISOAMYL BENZYL ETHER

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD FCTXAV 16,647,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A skin irritant. See also ETHERS. Flammable when exposed to heat or flame; can react with oxidizing materials. To fight fire, use foam, CO_2 , dry chemical.

BES750 CAS: 120-11-6 HR: 1
BENZYL ISOEUGENOL ETHER

mf: $C_{17}H_{18}O_2$ mw: 254.35

PROP: used in fragrance products.

SYNS: BENZYL ALCOHOL ETHER with ISOEUGENOL □ BENZYL ISOEUGENOL □ BENZYL-2-METHOXY-4-PROPENYLPHENYL ETHER

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD FCTXAV 11,1025,73

orl-rat LD50:4900 mg/kg FCTXAV 11,1025,73

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mildly toxic by ingestion. A skin irritant. See also ETHERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BET000 CAS: 51-12-7 HR: 3
N-BENZYL- β -(ISONICOTINYLDIAZINO)-PROPIONAMIDE

mf: $C_{16}H_{18}N_4O_2$ mw: 298.38

SYNS: N¹- β -BENZYL CARBAMOYLETHYL-N²-ISONICOTINOLHYDRAZINE □ 1-(2-(BENZYL CARBAMOYL) ETHYL)-2-ISONICOTINOYLHYDRAZINE □ (2-(2-BENZYL CARBAMYL)-ETHYL)-HYDRAZIDE ISONICOTINIC ACID □ N-BENZYL- β -(ISONICOTINOYLHYDRAZINE)PROPIONAMIDE □ DELMONEURINA □ ESPRIL □ ISALIZINA □ N-ISONICOTINOYL-N¹(β -N-BENZYL CARBOXAMIDOETHYL) HYDRAZINE □ MYGAL □ NIALAMIDE □ NIAMID □ NIAMIDAL □ NIAQUITIL □ NUREDAL □ NYAZIN □ P 1133 □ PSICODISTEN □ 4-PYRIDINE CARBOXYLIC ACID 2-(3-OXO-3-((PHENYLMETHYL) AMINO)PROPYL)HYDRAZIDE □ SURGEX

TOXICITY DATA with REFERENCE:

mma-sat 10 μ g/plate PLRCAT 12,423,80
 mmo-sat 10 μ g/plate MUREAV 40,305,76
 dnr-esc 27 μ mol/plate JTEHD6 9,287,82
 oms-bcs 10 mmol/L MUREAV 5,343,68
 dnd-mus-ipr 2450 μ mol/kg CNREA8 41,1469,81
 sce-mus-ipr 435 mg/kg JTEHD6 9,287,82
 orl-rat LD50:1700 mg/kg TXAPA9 1,524,59
 ipr-rat LD50:760 mg/kg TXAPA9 1,524,59
 orl-mus LD50:590 mg/kg 27ZQAG -,269,72
 ipr-mus LD50:200 mg/kg MPHEAE 16,267,67
 ivn-mus LD50:120 mg/kg 27ZQAG -,269,72

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion. Mutation data reported. Experimental reproductive effects. An antidepressant. When heated to decomposition it emits toxic fumes of NO_x .

BET750 CAS: 55165-33-8 HR: 3
4-(3-BENZYLISOPROPYLAMINO-2-HYDROXY PROPOXY)-9-METHOXY-7-METHYLFURO-(3,2-g)CHROMONE, HYDROCHLORIDE

mf: $C_{26}H_{29}NO_6 \cdot ClH$ mw: 488.02

TOXICITY DATA with REFERENCE:

orl-mus LD50:380 mg/kg EJMCA5 9,563,74
 ipr-mus LD50:69 mg/kg EJMCA5 9,563,74

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BEU250 CAS: 622-78-6 HR: 3
BENZYL-ISOTHIOCYANATE

mf: C_8H_7NS mw: 149.22

PROP: Orange-red, crystalline solid. Mp: 41°, bp: 230°, d: 1.125

SYNS: BENZYL MUSTARD OIL □ BENZYLSENFOEL (GERMAN) □ ISOTHIOCYANIC ACID BENZYL ESTER

TOXICITY DATA with REFERENCE:

mmo-sat 150 µg/plate ABCHA6 44,3017,80
 ipr-rat LDLo:100 mg/kg ARZNAD 16,870,66
 ipr-mus LDLo:100 mg/kg ARZNAD 21,121,71
 scu-mus LD50:150 mg/kg ARZNAD 5,505,55

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. Intensely irritating. Mutation data reported. Moderate fire hazard via heat, flame, and oxidizers. To fight fire, use water, spray, foam, dry chemical. When heated to decomposition it emits very toxic NO_x and SO_x. See also ESTERS and THIOCYANATES.

BEU500 CAS: 538-28-3 HR: 3
BENZYLISOTHIOUREA HYDROCHLORIDE

mf: C₈H₁₀N₂S•ClH mw: 202.72

PROP: Dimorphic. Mp: 146–148°.

SYNS: BENZYLISOTHIOURONIUM CHLORIDE □ 2-BENZYLISOTHIOURONIUM CHLORIDE □ BENZYLTHIOPSEUDOUREA HYDROCHLORIDE □ 2-BENZYL-2-THIOPSEUDOUREA HYDROCHLORIDE □ BENZYLTHIURONIUM CHLORIDE □ S-BENZYLTHIURONIUM CHLORIDE □ BTKH □ ISOTHIOURONIUM CHLORIDE, BENZYL □ 2-THIO-2-BENZYL-PSEUDOUREA HYDROCHLORIDE □ TL 944 □ USAF EK-2124

TOXICITY DATA with REFERENCE:

orl-rat LD50:150 mg/kg JPETAB 90,260,47
 ipr-mus LD50:50 mg/kg NTIS** AD277-689
 scu-mus LDLo:80 mg/kg NDRC** No. 9-4-1-9,43
 ivn-mus LD50:32 mg/kg CSLNX* NX#00167

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, intraperitoneal, subcutaneous, and intravenous routes. When heated to decomposition it emits very toxic fumes of HCl, SO_x, and NO_x.

BEU750 CAS: 140-25-0 HR: 1
BENZYL LAURATE

mf: C₁₉H₃₀O₂ mw: 290.49

PROP: Moisturizer in cosmetic products.

SYNS: BENZYL DODECANOATE □ DODECANOIC ACID BENZYL ESTER

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/kg/24H MOD FCTXAV 16,649,78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A skin irritant. See also ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BEU800 CAS: 35133-55-2 HR: 3
4-BENZYL-α-(4-METHOXYPHENYL)-β-METHYL-1-PIPERIDINEETHANOL

mf: C₂₂H₂₉NO₂ mw: 339.52

SYN: RC 61-96

TOXICITY DATA with REFERENCE:

orl-mus LD50:120 mg/kg ARZNAD 21,1992,71
 ipr-mus LD50:45 mg/kg ARZNAD 21,1992,71
 ivn-mus LD50:13 mg/kg ARZNAD 21,1992,71

SAFETY PROFILE: Poison by ingestion, intravenous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x.

BEW000 CAS: 1085-32-1 HR: 3
1-BENZYL-2-(3-METHYLISOXAZOL-5-YL) CARBONYL HYDRAZINE

mf: C₁₂H₁₃N₃O₂ mw: 231.28

SYN: 3-METHYL-5-ISOXAZOLECARBOXYLIC ACID 2-BENZYLHYDRAZIDE

TOXICITY DATA with REFERENCE:

orl-mus LD50:178 mg/kg SKNEA7 14,58,64
 ipr-mus LD50:245 mg/kg SKNEA7 14,58,64
 orl-cat LD50:100 mg/kg SKNEA7 14,58,64

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x.

BEW500 CAS: 15090-12-7 HR: 3
1-BENZYL-3-METHYL-5-(2-(4-METHYL-1-PIPERAZINYL)ETHOXY)PYRAZOLE

mf: C₁₈H₂₆N₄O mw: 314.48

SYN: B-324

TOXICITY DATA with REFERENCE:

orl-mus LD50:362 mg/kg ARZNAD 17,214,67
 scu-mus LD50:230 mg/kg ARZNAD 17,214,67

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.

BEW750 CAS: 15090-10-5 HR: 3
1-BENZYL-3-METHYL-5-(2-(2-METHYL-PIPERIDINO)ETHOXY)PYRAZOLE

mf: C₁₉H₂₇N₃O mw: 313.49

SYN: B-322

TOXICITY DATA with REFERENCE:

orl-mus LD50:335 mg/kg ARZNAD 17,214,67
 scu-mus LD50:182 mg/kg ARZNAD 17,214,67

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of NO_x.

BEX500 CAS: 306-07-0 HR: 3
BENZYMETHYLPROPYNYLAMINE HYDROCHLORIDE

mf: C₁₁H₁₃N•ClH mw: 195.71

PROP: Crystals from EtOH/Et₂O. Mp: 154–155°. Sol in H₂O: (sol unstable).

SYNS: A 19120 □ N-BENZYL-N-METHYL-2-PROPYNYLAMINE HYDROCHLORIDE □ EUDATINE □ N-METHYL-N-(2-PROPYNYL)BENZYLAMINE HYDROCHLORIDE □ PARGYLIN HYDROCHLORIDE □ USAF A-19120

TOXICITY DATA with REFERENCE:

orl-man TDLo:108 mg/kg/26W-I JCLPDE 44,25,83
 orl-wmn TDLo:1500 µg/kg/D:CNS,PSY AJPSAO 118,255,61
 orl-rat LD50:250 mg/kg 27ZQAG -,401,72
 ipr-rat LD50:142 mg/kg ANYAA9 107,1068,63
 ivn-rat LD50:175 mg/kg 27ZQAG -,401,72
 orl-mus LD50:680 mg/kg ANYAA9 107,1068,63
 ipr-mus LD50:300 mg/kg NTIS** AD277-689
 orl-dog LD50:175 mg/kg ANYAA9 107,1068,63

SAFETY PROFILE: Poison by ingestion, intraperitoneal, and intravenous routes. Human systemic effects by ingestion: effects on fluid intake, psychological effects. Experimental reproductive effects. When heated to decomposition it emits very toxic fumes of HCl and NO_x.

BEX750 CAS: 7368-12-9 HR: 3
(1-BENZYL-3-METHYL-5-PYRAZOLYLOXY-ETHYL)TRIMETHYLAMMONIUM IODIDE

mf: C₁₆H₂₄N₃O•I mw: 401.33

SYN: B-325

TOXICITY DATA with REFERENCE:

orl-mus LD50:4013 mg/kg ARZNAD 17,214,67

scu-mus LD50:181 mg/kg ARZNAD 17,214,67

SAFETY PROFILE: Poison by subcutaneous route. Moderately toxic by ingestion. See also IODIDES. When heated to decomposition it emits very toxic fumes of NH₃, NO_x, and I⁻.

BEY800 CAS: 62064-66-8 HR: 3
N-BENZYL-α-METHYL-m-TRIFLUOROMETHYL PHENETHYLAMINE

mf: C₁₇H₁₈F₃N mw: 293.36

SYN: N-BENZYL-α-METHYL-3-TRIFLUOROMETHYL PHENETHYLAMINE

TOXICITY DATA with REFERENCE:

orl-mus LD50:300 mg/kg ARZNAD 27,116,77

ipr-mus LD50:144 mg/kg ISYAM* -,21,70

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of F⁻ and NO_x.

BEY900 CAS: 538-74-9 HR: 2
BENZYL MONOSULFIDE

mf: C₁₄H₁₄S mw: 214.34

PROP: Beige crystals or powder. Mp: 49–50°, bp: decomposes. Insol in water.

SYNS: BENZENE, 1,1'-(THIOBIS(METHYLENE))BIS- □ BENZYL SULFIDE (8CI) □ BENZYL THIOETHER □ DIBENZYL MONOSULFIDE □ DIBENZYL SULFIDE □ DIBENZYL THIOETHER

TOXICITY DATA with REFERENCE:

orl-rat LD50:>2 g/kg ATDAEI 15(Suppl 1),S89,1996

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of SO_x.

BFA000 CAS: 63906-64-9 HR: 3
8-BENZYL-7-(1'-MORPHOLINO-2'-AMINO)-ETHYLTHEOPHYLLINE HYDROCHLORIDE

mf: C₂₀H₂₃N₆O₃•ClH mw: 431.95

SYN: AC 3092

TOXICITY DATA with REFERENCE:

orl-rat LD50:1498 mg/kg ARZNAD 19,1113,69

ipr-rat LD50:140 mg/kg ARZNAD 19,1113,69

scu-rat LD50:331 mg/kg ARZNAD 19,1113,69

ivn-rat LD50:54 mg/kg ARZNAD 19,1113,69

orl-mus LD50:247 mg/kg ARZNAD 19,1113,69

ipr-mus LD50:83 mg/kg ARZNAD 19,1113,69

scu-mus LD50:126 mg/kg ARZNAD 19,1113,69

SAFETY PROFILE: Poison by ingestion, intraperitoneal, subcutaneous, and intravenous routes. When heated to decomposition it emits very toxic fumes of NO_x and HCl. See other theophylline entries.

BFA250 CAS: 15285-42-4 HR: 3
BENZYL NITRATE

mf: C₇H₇NO₃ mw: 153.14

PROP: Oil. Bp: 90–92° @ 10 mm.

SAFETY PROFILE: Explodes above 180°C. Violent reaction with Lewis acids (e.g., sulfuric acid, tin(IV) chloride, boron trifluoride) results in gas evolution. When heated to decomposition it emits toxic fumes of NO_x. See also NITRATES.

BFA899 HR: 3
BENZYLOXY ACETYLENE

mf: C₉H₈O mw: 132.16

SAFETY PROFILE: Explodes if heated above 60° *in vacuo*. When heated to decomposition it emits acrid smoke and fumes.

BFA930 CAS: 63978-98-3 HR: 3
5-BENZYLOXY-8-CHLORO-N,N-DIMETHYL-1,2,3,4-TETRAHYDRO-1-NAPHTHYLAMINE HYDROCHLORIDE

mf: C₁₉H₂₂ClNO•ClH mw: 352.33

SYN: 1-NAPHTHYLAMINE, 1,2,3,4-TETRAHYDRO-5-BENZYLOXY-8-CHLORO-N,N-DIMETHYL-, HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

ipr-mus LDLo:316 mg/kg JMCMAR 16,1003,1973

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x, HCl, and Cl⁻.

BFC000 CAS: 40283-91-8 HR: 3
S-((N-(2-BENZYLOXYETHYL)AMIDINO)-METHYL) HYDROGEN THIOSULFATE

mf: C₁₁H₁₆N₂O₄S₂ mw: 304.41

TOXICITY DATA with REFERENCE:

orl-mus LD50:90 mg/kg JMCMAR 15,1313,72

ipr-mus LD50:60 mg/kg JMCMAR 15,1313,72

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.

BFC200 CAS: 101670-78-4 HR: 3
5-BENZYLOXY-3-ISONIPECOTOYLINDOLE

mf: C₂₁H₂₁N₂O₂ mw: 333.44

SYNS: INDOLE, 5-BENZYLOXY-3-ISONIPECOTOYL- □ KETONE, 5-BENZYLOXY-3-INDOLYL 4-PIPERIDYL

TOXICITY DATA with REFERENCE:

ivn-mus LD50:28 mg/kg CSLNX* NX#12396

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: A poison by intravenous route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x.

BFC225 CAS: 16495-13-9 HR: D
(+)-(BENZYLOXYMETHYL)OXIRANE

mf: $C_{10}H_{12}O_2$ mw: 164.22

SYNS: OXIRANE, ((PHENYLMETHOXY)METHYL)-, (S)- □ (S)-o-BENZYLGLYCIDOL □ (+)-BENZYL GLYCIDYL ETHER □ (R)-1-(BENZYOXY)-2,3-EPOXYPROPANE □ (S)-(BENZYOXY METHYL)OXIRANE □ (S)-(+)-BENZYOXYMETHYLOXIRANE □ PROPANE, 1-(BENZYOXY)-2,3-EPOXY-, (R)- □ PROPANE, 1-(BENZYOXY)-2,3-EPOXY-, (S)-

TOXICITY DATA with REFERENCE:

mic-sat 660 nmol/plate MUREAV 298,197,1993
uns-ipr-mus 100 mg/kg MUREAV 298,197,1993
cyt-ipr-mus 100 mg/kg MUREAV 298,197,1993
sce-ipr-mus 100 mg/kg MUREAV 298,197,1993

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits acrid smoke and irritating vapors.

BFC250 CAS: 14226-68-7 HR: 3
5-BENZYOXY-3-(1-METHYL-2-PYRROLIDINYL)INDOLE

mf: $C_{20}H_{22}N_2O$ mw: 306.44

TOXICITY DATA with REFERENCE:

ipr-rat LD50:71 mg/kg JMCAR 7,415,64
ipr-mus LD50:100 mg/kg JMCAR 7,415,64

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits toxic fumes of NO_x .

BFC300 CAS: 41920-59-6 HR: 2
p-(BENZYOXY)PHENYL BIS(1-AZIRIDINYL) PHOSPHINATE

mf: $C_{17}H_{19}N_2O_3P$ mw: 330.35

SYN: PHOSPHINIC ACID, BIS(1-AZIRIDINYL)-, p-(BENZYOXY) PHENYL ESTER

TOXICITY DATA with REFERENCE:

ipr-mus LD50:595 mg/kg JMCAR 16,391,1973

SAFETY PROFILE: Moderately toxic by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and PO_x .

BFC400 CAS: 1252-18-2 HR: D
1-(p-(BENZYOXY)PHENYL)-2-(o-FLUOROPHENYL)-1-PHENYLETHYLENE

mf: $C_{27}H_{21}FO$ mw: 380.48

SYNS: ETHER, BENZYL p-(o-FLUORO- α -PHENYLSTYRYL) PHENYL □ ETHYLENE, 1-(p-(BENZYOXY)PHENYL)-2-(o-FLUOROPHENYL)-1-PHENYL- □ STILBENE, 4-(BENZYOXY)-2'-FLUORO- α -PHENYL-

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits toxic fumes of F^- .

BFC450 HR: D
2-(m-(BENZYOXY)PHENYL)PYRAZOLO(1,5a)-QUINOLINE

mf: $C_{24}H_{20}N_2O$ mw: 352.46

SYN: PYRAZOLO(1,5-a)QUINOLINE, 2-(m-(BENZYOXY)PHENYL)-

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x .

BFC460 CAS: 81862-10-4 HR: 2

N,N'-(3-BENZYOXY-1,2-PROPANEDIOXY SULFINYL)BIS(3-METHYLPHENYL METHYL CARBAMATE)

mf: $C_{28}H_{32}N_2O_9S_2$ mw: 604.74

SYN: 4,7-DIOXA-3,8-DITHIA-2,9-DIAZADECANEDIOIC ACID, 2,9-DIMETHYL-5-((PHENYLMETHOXY)METHYL)-, BIS(3-METHYL PHENYL) ESTER, 3,8-DIOXIDE

TOXICITY DATA with REFERENCE:

orl-mus LD50:>1 g/kg USXXAM #4315026

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BFC470 CAS: 81877-67-0 HR: 2
N,N'-(3-BENZYOXY-1,2-PROPANEDIOXY SULFINYL)BIS(1-NAPHTHYLMETHYL CARBAMATE)

mf: $C_{34}H_{32}N_2O_9S_2$ mw: 676.80

SYN: 4,7-DIOXA-3,8-DITHIA-2,9-DIAZADECANEDIOIC ACID, 2,9-DIMETHYL-5-((PHENYLMETHOXY)METHYL)-, DI-1-NAPHTHA LENYL ESTER, 3,8-DIOXIDE

TOXICITY DATA with REFERENCE:

orl-mus LD50:>1 g/kg USXXAM #4315026

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BFC500 CAS: 40283-92-9 HR: 3
S-((N-(3-BENZYOXYPROPYL)AMIDINO) METHYL) HYDROGEN THIOSULFATE

mf: $C_{12}H_{18}N_2O_4S_2$ mw: 318.44

TOXICITY DATA with REFERENCE:

orl-mus LD50:300 mg/kg JMCAR 15,1313,72

ipr-mus LD50:30 mg/kg JMCAR 15,1313,72

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of NO_x and SO_x .

BFC750 CAS: 1538-09-6 HR: 2
BENZYL PENCILLINDIBENZYLETHYLENE-DIAMINE SALT

mf: $C_{32}H_{36}N_4O_8S_2 \cdot C_{16}H_{20}N_2$ mw: 909.22

PROP: Crystals, Mp: 123–124°.

SYNS: BEACILLIN □ BEN-P □ BENZACILLIN □ BENZATHINE BENZYL PENCILLIN □ BENZATHINE PENCILLIN □ BENZATHINE PENCILLIN G □ BENZETHACIL □ BENZYL PENCILLIN BENZATHINE □ BICA-PENCILLIN □ BICILLIN □ CEPACILLINA □ CEPACILLIN □ CILLENTA □ DBED DIPENCILLIN G □ DBED PENCILLIN □ DEBECILLIN □ DEBECYLINA □ DIAMINE DIPENCILLIN G □ DIAMINO CILLIAN □ DIBENCIL □ DIBENCILLIN □ N,N'-DIBENZYL ETHYLENEDIAMINE BIS(BENZYL PENCILLIN) □ DIBENZYL ETHYLENEDIAMINE-DI-PENCILLIN G □ N,N'-DIBENZYL ETHYLENEDIAMINE, compounded with PENCILLIN G (1:2) □ DIPO-SALT □ DURABIOTIC □ DURA-PENITA □ DUROPENIN □ EXTENCILLINE □ EXTENICILLINE □ LENTOCILLIN □ LENTOPENIL □ LEOMYPEN □ LONGACILLAN □ LONGICIL □ LPG □ MEGACILLIN SUSPENSION □ MOLDAMIN □ NCI-C56100 □ NEOLIN □ PENADUR □ PENADUR L-A □ PENDEPON □ PEN-DI-BEN □ PENDITAN □ PENDURAN □ PENCILLIN G, compounded with N,N'-DIBENZYLETHYLENE-DIAMINE (2:1) □ PENCILLIN G SALT of N,N'-DIBENZYL-ETHYLENEDIAMINE □ PENIDURAL □ PENIDURE □

PENILENTE □ PERMAPEN □ RETARPEN □ TARDOCILLIN □
VETARCILLIN □ VICIN □ WYCILLINA

TOXICITY DATA with REFERENCE:

orl-mus LD50:2000 mg/kg NIIRDN 6,774,82

ipr-mus LDLo:460 mg/kg NIIRDN 6,774,82

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. Experimental reproductive effects. When heated to decomposition it emits very toxic fumes of NO_x and SO_x. See other penicillin entries.

BFD000 CAS: 113-98-4 HR: 3
BENZYL PENICILLINIC ACID POTASSIUM SALT

mf: C₁₆H₁₇N₂O₄S•K mw: 372.51

PROP: Needles from butanol (aq). Mp: 214–217° (decomp). Sol in H₂O.

SYNS: BENZYL PENICILLIN POTASSIUM □ BENZYL PENICILLIN POTASSIUM SALT □ CILLORAL □ COSMOPEN □ CRISTAPEN □ CRYSTAPEN □ ESKACILLIN □ FALAPEN □ FORPEN □ HIPERCILINA □ HYASORB □ HYLENTA □ MEGACILLIN TABLETS □ MONOPEN □ NOTARAL □ PENALEV □ PENICILLIN G POTASSIUM □ PENICILLIN G POTASSIUM SALT □ PENISEM □ PENTID □ PENTIDS □ PFIZERPEN □ POTASSIUM BENZYL PENICILLIN □ POTASSIUM BENZYL PENICILLINATE □ POTASSIUM BENZYL PENICILLIN G □ POTASSIUM PENICILLIN G □ POTASSIUM SALT of BENZYL PENICILLIN □ QIDPEN G □ SCOTCIL □ SK-PENICILLIN G □ SUGRACILLIN □ TABILIN □ TU CILLIN

TOXICITY DATA with REFERENCE:

spm-rat-unr 200 mg/kg/8D JOURAA 112,348,74

orl-rat LD50:6700 mg/kg AIPTAK 123,295,60

scu-rat LD50:11,250 mg/kg TXAPA9 9,445,66

ivn-rat LD50:243 mg/kg ABANAE 3,534,55/56

orl-mus LD50:6257 mg/kg AIPTAK 125,83,60

ivn-mus LD50:240 mg/kg ABANAE 3,534,55/56

ice-mus LDLo:2 mg/kg PLMEAA 49,103,83

orl-rbt LD50:5848 mg/kg ANTCAO 10,376,60

orl-gpg LDLo:1 g/kg ANTCAO 5,463,55

ipr-gpg LDLo:500 mg/kg ANTCAO 5,463,55

ivn-gpg LD50:303 mg/kg RPOBAR 2,306,70

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intracerebral and intravenous routes. Moderately toxic by intraperitoneal route. Mutation data reported. See other penicillin entries. When heated to decomposition it emits toxic fumes of NO_x and SO_x.

BFD250 CAS: 69-57-8 HR: 3
BENZYL PENICILLINIC ACID SODIUM SALT

mf: C₁₆H₁₇N₂O₄S•Na mw: 356.40

PROP: Needles from butanol (aq). Mp: 215° (decomp). Sol in H₂O and MeOH.

SYNS: AMERICAN PENICILLIN □ BENZYL PENICILLIN SODIUM □ CRYSTAPEN □ MYCOFARM □ NOVOCILLIN □ PEN-A-BRASIVE □ PENICILLIN-G, MONOSODIUM SALT □ PENICILLIN G, SODIUM □ PENICILLIN G, SODIUM SALT □ PENILARYN □ PENZYL PENICILLIN SODIUM SALT □ SODIUM BENZYL PENICILLIN □ SODIUM BENZYL PENICILLIN G □ SODIUM BENZYL PENICILLINATE □ SODIUM PENICILLIN □

SODIUM PENICILLIN G □ SODIUM PENICILLIN II □ VETICILLIN

TOXICITY DATA with REFERENCE:

orl-rat LD50:6916 mg/kg AMPMAR 39,259,78

par-rat LD50:2900 µg/kg AACHAX -,863,65

scu-mus LD50:4750 mg/kg NYKZAU 55,23,59

ivn-mus LD50:1500 mg/kg ARZNAD 9,31,59

ims-mus LD50:2800 mg/kg ARZNAD 9,31,59

ice-mus LD50:3800 µg/kg NYKZAU 55,23,59

ims-gpg LDLo:60 mg/kg LBASAE 30,524,80

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Poison by intracerebral, parenteral, and intramuscular routes. Moderately toxic via intravenous route. Mildly toxic by ingestion. Experimental teratogenic and reproductive effects. Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of NO_x, Na₂O, and SO_x. An antibiotic. See other penicillin entries.

BFD400 HR: 1

BENZYL PHENYLACETATE

mf: C₁₅H₁₄O₂ mw: 226.27

PROP: Colorless liquid; sweet, floral odor with honey undertone. D: 1.095–1.099, refr index: 1.553–1.558, flash p: 212°F. Sol in alc, chloroform, ether.

SYN: FEMA No. 2149

SAFETY PROFILE: Combustible liquid. When heated to decomposition it emits acrid smoke and irritating fumes.

BFD750 CAS: 612-98-6 HR: D

BENZYLPHENYL NITROSAMINE

mf: C₁₃H₁₂N₂O mw: 212.27

SYNS: BENZENEMETHANAMINE-N-NITROSO-N-PHENYL □ N-NITROSOPHENYLBENZYLAMINE

TOXICITY DATA with REFERENCE:

mma-esc 2 µmol/plate GANNA2 75,8,84

mrc-esc 6 µg/well MUREAV 46,53,77

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x. See also NITROSAMINES and N-NITROSO COMPOUNDS.

BFD760 CAS: 3762-27-4 HR: 3
BENZYLPHOSPHONIC ACID DIBUTYL ESTER

mf: C₁₅H₂₅O₃P mw: 284.37

SYNS: DI-N-BUTYL BENZYLPHOSPHONATE □ PHOSPHONIC ACID, BENZYL-, DIBUTYL ESTER □ PHOSPHONIC ACID, (PHENYLMETHYL)-, DIBUTYL ESTER

TOXICITY DATA with REFERENCE:

ivn-mus LD50:56 mg/kg CSLNX* NX#05783

SAFETY PROFILE: A poison by ingestion route. When heated to decomposition it emits toxic vapors of PO_x.

BFE770 CAS: 25174-65-6 HR: 3
4-BENZYLPIPERAZINYL β-(p-CHLORO-

PHENYL)PHENETHYL KETONEmf: C₂₆H₂₇ClN₂O mw: 419.00

SYNS: 1-BENZYL-4-(3-(p-CHLOROPHENYL)-3-PHENYL-PROPIONYL)PIPERAZINE □ KETONE, 4-BENZYL-PIPERAZINYL β-(p-CHLOROPHENYL)PHENETHYL □ PIPERAZINE, 1-BENZYL-4-(p-CHLORO-β-PHENYL-HYDROCINNAMOYL)- □ PIPERAZINE, 1-BENZYL-4-(3-(p-CHLOROPHENYL)-3-PHENYLPROPIONYL)-

TOXICITY DATA with REFERENCE:

ipr-mus LD50:800 mg/kg JMCAR 12,860,69

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BFD800**HR: D****BENZYL PROPIONATE**mf: C₁₀H₁₂O₂ mw: 164.20

PROP: Colorless liquid; sweet, floral fruity odor. D: 1.028–1.032, refr index: 1.496–1.500. Sol alc, most oils; sltly sol in propylene glycol; insol in glycerin, water.

SYN: FEMA No. 2150

SAFETY PROFILE: When heated to decomposition it emits acrid smoke and irritating fumes.

BFG500**CAS: 59177-78-5****HR: 3****N-BENZYL-4-PROTOADAMANTANEMETHANAMINE MALEATE**mf: C₁₈H₂₅N•C₄H₄O₄ mw: 371.52**TOXICITY DATA with REFERENCE:**

orl-mus LD50:186 mg/kg JMCAR 19,967,76

ipr-mus LD50:74 mg/kg JMCAR 19,967,76

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x.

BFG600**CAS: 101-82-6****HR: 2****2-BENZYLPIRIDINE**mf: C₁₂H₁₁N mw: 169.24**PROP:** Bp: 276°.

SYNS: 2-(PHENYLMETHYL)PYRIDINE □ PYRIDINE, 2-BENZYL- □ PYRIDINE, 2-(PHENYLMETHYL)-(9CI)

TOXICITY DATA with REFERENCE:

scu-mus LD50:1500 mg/kg AEPPAE 227,129,55

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by subcutaneous route. When heated to decomposition it emits toxic vapors of NO_x.

BFG750**CAS: 2116-65-6****HR: 3****4-BENZYLPIRIDINE**mf: C₁₂H₁₁N mw: 169.24**PROP:** Liquid. D: 1.076 @ 0°/0°, bp: 287° @ 742 mm.**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:25 mg/kg CSLNX* NX#12240

orl-bwd LD50:18 mg/kg TXAPA9 21,315,72

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion and intravenous routes. A flammable material. Incompatible

with oxidizers. When heated to decomposition it emits toxic fumes of NO_x.

BFH000**CAS: 2876-13-3****HR: 3****1-BENZYLPIRIDINIUM CHLORIDE**mf: C₁₂H₁₂N⁺Cl⁻ mw: 205.70**TOXICITY DATA with REFERENCE:**

scu-mus LDLo:80 mg/kg NDRC** -,21,43

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by subcutaneous route. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x. See also CHLORIDES.

BFH100**CAS: 3670-09-5****HR: 3****BENZYL 4-PYRIDYL KETONE THIOSEMICARBAZONE****SYN:** KETONE, BENZYL(4-PYRIDYL), THIOSEMICARBAZONE**TOXICITY DATA with REFERENCE:**

orl-mus LD50:450 mg/kg JMCAR 8,676,65

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by ingestion. A flammable liquid. When heated to decomposition it emits toxic vapors of SO_x.

BF1250**HR: 3****2-(BENZYL(2-(PYRROLIDINYL)ETHYL)AMINO)-2'-CHLOROACETANILIDE DIHYDROCHLORIDE**mf: C₂₁H₂₆ClN₃O•2ClH mw: 444.87**SYN:** C 5399**TOXICITY DATA with REFERENCE:**

eye-rbt 2% SEV ARZNAD 9,167,59

scu-mus LD50:287 mg/kg ARZNAD 9,167,59

SAFETY PROFILE: Poison by subcutaneous route. A severe eye irritant. When heated to decomposition it emits very toxic fumes of Cl⁻, NO_x, and HCl.

BF1400**CAS: 2284-30-2****HR: 3****4-BENZYL RESORCINOL**mf: C₁₃H₁₂O₂ mw: 200.25**SYN:** RESORCINOL, 4-BENZYL-**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:73 mg/kg BJPCAL 22,221,64

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits acrid smoke and irritating vapors.

BFJ750**CAS: 118-58-1****HR: 2****BENZYL SALICYLATE**mf: C₁₄H₁₂O₃ mw: 228.26

PROP: Thick colorless liquid; pleasant odor. Bp: 208° @ 26 mm, d: 1.175 @ 20°, refr index: 1.579. Sol in fixed oils; insol in glycerin and propylene glycol.

SYNS: BENZYL-o-HYDROXYBENZOATE □ FEMA No. 2151**TOXICITY DATA with REFERENCE:**

orl-rat LD50:2227 mg/kg FCTXAV 11,1029,73

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. See also BENZYL ALCOHOL, SALICYLIC ACID, and ESTERS. Combustible when exposed to heat or flame. When heated to decomposition it emits acrid smoke and irritating fumes. Incompatible with oxidizing materials.

BFJ825 CAS: 766-06-3 HR: 3
BENZYL SILANE

mf: $C_7H_{10}Si$ mw: 122.24

PROP: Liquid. Bp: 149°.

SAFETY PROFILE: Ignites spontaneously in air. Upon decomposition it emits acrid smoke and fumes.

BFJ850 CAS: 1121-53-5 HR: 3
BENZYL SODIUM

mf: C_7H_7Na mw: 114.12

PROP: Red crystals. Decomp below mp.

SAFETY PROFILE: Ignites spontaneously in air. Upon decomposition it emits toxic fumes of Na_2O .

BFK000 CAS: 35506-85-5 HR: 3
BENZYL SULFITE

mf: $C_{14}H_{14}O_3S$ mw: 262.34

PROP: Liquid. Bp: 193–199° @ 15 mm (part decomp).

SYN: SULFUROUS ACID, DIBENZYL ESTER

TOXICITY DATA with REFERENCE:

ivn-mus LD50:178 mg/kg CSLNX* NX#02156

SAFETY PROFILE: Poison by intravenous route. See also SULFITES. When heated to decomposition it emits toxic fumes of SO_x .

BFK325 CAS: 1090-53-5 HR: 3
1-BENZYL-2-(3-(4,5,6,7-TETRAHYDROBENZISOXAZOYL)CARBONYL)HYDRAZINE HYDROCHLORIDE

mf: $C_{15}H_{17}N_3O_4 \cdot ClH$ mw: 307.81

TOXICITY DATA with REFERENCE:

orl-mus LD50:2082 mg/kg SKNEA7 14,58,64

ipr-mus LD50:723 mg/kg SKNEA7 14,58,64

orl-cat LD50:118 mg/kg SKNEA7 14,58,64

SAFETY PROFILE: Poison by ingestion. Moderately toxic by intraperitoneal route. When heated to decomposition it emits toxic fumes of NO_x and HCl.

BFK370 CAS: 89398-07-2 HR: 3
7-BENZYL-3-THIA-7-AZABICYCLO(3.3.1)-NONANE PERCHLORATE

mf: $C_{14}H_{19}NS \cdot ClHO_4$ mw: 333.86

SYNS: BRB-I-28 PERCHLORATE □ 7-(PHENYLMETHYL)-3-THIA-7-AZABICYCLO(3.3.1)NONANE PERCHLORATE □ 3-THIA-7-AZABICYCLO(3.3.1)NONANE, 7-(PHENYLMETHYL)-, PERCHLORATE

TOXICITY DATA with REFERENCE:

orl-mus LD50:128 mg/kg FCTOD7 38,817,2000

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x , SO_x , and Cl^- .

BFK750 CAS: 13402-51-2 HR: 3
S-BENZYL THIOBENZOATE

mf: $C_{14}H_{12}OS$ mw: 228.32

PROP: Crystals from EtOH. Mp: 39.5°.

SYN: TIBENZATE

TOXICITY DATA with REFERENCE:

orl-mus LD50:1550 mg/kg YKKZAJ 89,1179,69

ivn-mus LD50:180 mg/kg CSLNX* NX#02522

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of SO_x . See also ESTERS.

BFL000 CAS: 3012-37-1 HR: 3
BENZYL THIOCYANATE

mf: C_8H_7NS mw: 149.22

PROP: Orange-red crystals or solid. Mp: 41–42°, bp: 230°, d: 1.125.

SYNS: BENZYL MUSTARD OIL □ PHENYLMETHYL ESTER THIOCYANIC ACID (9CI) □ SOLVAT 14 □ α -THIOCYANA TOTOLUENE □ TROPEOLIN

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:40 mg/kg ARZNAD 16,870,66

ipr-mus LD50:17 mg/kg PCBPBS 2,95,72

scu-mus LD50:100 mg/kg JJPAAZ 3,99,54

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by subcutaneous and intraperitoneal routes. See also THIOCYANATES. When heated to decomposition it emits very toxic fumes of NO_x , SO_x , and CN^- .

BFL100 CAS: 4332-51-8 HR: D
2-BENZYLTHIOETHYL CHLORIDE

mf: $C_9H_{11}ClS$ mw: 186.71

SYNS: 2-CHLOROETHYL BENZYL SULFIDE □ α -(2-CHLOROETHYLTHIO)TOLUENE □ BENZENE, (((2-CHLOROETHYL)THIO)METHYL) □ BENZYL β -CHLOROETHYL SULFIDE □ BENZYL 2-CHLOROETHYL SULFIDE □ SULFIDE, BENZYL 2-CHLOROETHYL

TOXICITY DATA with REFERENCE:

mic-sat 40 nmol/plate BCPCA6 38,935,1989

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of SO_x and Cl^- .

BFL125 CAS: 1874-58-4 HR: 3
BENZYLTHIOGUANINE

mf: $C_{12}N_{11}N_5S$ mw: 257.34

SYNS: 2-AMINO-6-BENZYL MERCAPTOPYRIMIDINE □ 2-AMINO-6-BENZYL-MP □ 2-AMINO-6-(BENZYLTHIO)PURINE □ 6-BENZYLTHIOGUANINE □ NSC-15747 □ 6-((PHENYLMETHYL)THIO)-1H-PURIN-2-AMINE (9CI) □ SRI 702

TOXICITY DATA with REFERENCE:

ipr-mus LD50:222 mg/kg NCISP* JAN86

SAFETY PROFILE: Poison by intraperitoneal route. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x and SO_x .

BFL250 CAS: 98-07-7 HR: 3
BENZYL TRICHLORIDE

DOT: UN 2226mf: $C_7H_5Cl_3$ mw: 195.47**PROP:** Clear, colorless to yellowish liquid; penetrating odor. Mp: -5° , bp: 221° , d: 1.38 @ $15.5^\circ/15.5^\circ$, vap d: 6.77.**SYNS:** BENZENYL CHLORIDE □ BENZENYL TRICHLORIDE □ BENZOIC TRICHLORIDE □ BENZOTRICHORIDE (DOT, MAK) □ BENZYLIDYNE CHLORIDE □ CHLORURE de BENZENYLE (FRENCH) □ PHENYL CHLOROFORM □ PHENYLTRICHLORO METHANE □ RCRA WASTE NUMBER U023 □ TOLUENE TRICHLORIDE □ TRICHLOR-METHYLBENZENE (DUTCH) □ TRICHLORMETHYLBENZOL (GERMAN) □ TRICHLOROMETHYLBENZENE □ 1-(TRICHLOROMETHYL) BENZENE □ TRICHLOROMETILBENZENE (ITALIAN) □ TRICHLOROPHENYLMETHANE □ α,α,α -TRICHLOROTOLUENE □ ω,ω,ω -TRICHLOROTOLUENE □ TRICHLOROTOLUENE (ITALIAN)**TOXICITY DATA with REFERENCE:**

skn-rbt 20 mg/24H MOD 85JCAE -,157,86

eye-rbt 50 μ g/24H SEV 85JCAE -,157,86

mma-esc 500 nmol/plate/20M MUREAV 54,143,78

mrc-bcs 2600 nmol/disc MUREAV 54,143,78

ihl-uns LC50:60 mg/m³ GTPZAB 30(3),6,86**CONSENSUS REPORTS:** NTP 10th Report on Carcinogens. IARC Cancer Review: Human Limited Evidence IMEMDT 29,73,82; Animal Sufficient Evidence IMEMDT 29,73,82. EPA Genetic Toxicology Program. EPA Extremely Hazardous Substances List. Reported in EPA TSCA Inventory.**ACGIH TLV:** CL 0.1 (skin); Suspected Human Carcinogen**DFG MAK:** Confirmed Human Carcinogen**DOT CLASSIFICATION:** 8; Label: Corrosive**SAFETY PROFILE:** Confirmed carcinogen with experimental carcinogenic data by skin contact and neoplastigenic data by inhalation. Experimental poison by inhalation. Corrosive to the skin, eyes, and mucous membranes. Large doses can cause central nervous system depression. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl^- . See also CHLORINATED HYDROCARBONS, AROMATIC.**BFL300 CAS: 56-37-1 HR: 3****BENZYLTRIETHYLAMMONIUM CHLORIDE**mf: $C_{13}H_{22}N \cdot Cl$ mw: 227.81**PROP:** White to yellow solid.**SYNS:** AMMONIUM, BENZYLTRIETHYL-, CHLORIDE □ BENZENEMETHANAMINIUM, N,N,N-TRIETHYL-, CHLORIDE (9CI) □ TEBAC □ N,N,N-TRIETHYLBENZENEMETHANAMINIUM CHLORIDE □ TRIETHYLBENZYLAMMONIUM CHLORIDE**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:18 mg/kg CSLNX* NX#01867

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intravenous route. When heated to decomposition it emits toxic vapors of NO_x and Cl^- .**BFM000 CAS: 2971-75-7 HR: 3**
1-BENZYL-2-TRIMETHYLACETYLHYDRAZINE HYDROCHLORIDEmf: $C_{12}H_{18}N_2O \cdot ClH$ mw: 169.56**TOXICITY DATA with REFERENCE:**

orl-mus LD50:400 mg/kg 27ZQAG -,403,72

scu-mus LD50:290 mg/kg 27ZQAG -,403,72

ivn-mus LD50:280 mg/kg 27ZQAG -,403,72

SAFETY PROFILE: Poison by ingestion, subcutaneous, and intravenous routes. When heated to decomposition it emits very toxic fumes of NO_x and HCl .**BFM250 CAS: 56-93-9 HR: 3**
BENZYLTRIMETHYLAMMONIUM CHLORIDEmf: $C_{10}H_{16}N \cdot Cl$ mw: 185.72**PROP:** Bp: $>135^\circ$ (some decomp), fp: $<-50^\circ$ (for 61% sol), d: 1.07 @ $20^\circ/20^\circ$ (61% sol).**SYNS:** BENZENEMETHANAMINIUM, N,N,N-TRIMETHYL-, CHLORIDE (9CI) □ BTM □ TMBAC □ N,N,N-TRIMETHYLBENZENEMETHANAMINIUM CHLORIDE □ TRIMETHYLBENZYLAMMONIUM CHLORIDE**TOXICITY DATA with REFERENCE:**

orl-rat LDLo:250 mg/kg NCNSA6 5,39,53

orl-mus LDLo:1600 mg/kg JPMSAE 69,327,80

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by ingestion. Combustible. When heated to decomposition it emits very toxic fumes of NH_3 , NO_x , and Cl^- .**BFM500 CAS: 100-85-6 HR: 3**
BENZYLTRIMETHYLAMMONIUM HYDROXIDEmf: $C_{10}H_{16}N \cdot HO$ mw: 167.28**PROP:** Solid. Fp: 15° . Sol in a variety of solvents.**SYN:** TRIMETHYLBENZYLAMMONIUM HYDROXIDE**TOXICITY DATA with REFERENCE:**

scu-mus LDLo:35 mg/kg JPETAB 28,367,26

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by subcutaneous route. A strong base. When heated to decomposition it emits toxic fumes of NH_3 and NO_x . See also ALKALIES.**BFM750 CAS: 4525-46-6 HR: 3**
BENZYL TRIMETHYL AMMONIUM IODIDEmf: $C_{10}H_{16}N \cdot I$ mw: 277.17**PROP:** Solid. Mp: $181-182^\circ$.**SYNS:** BENZYLDIMETHYLAMINE METHIODIDE □ PHEN-METHYL TRIMETHYLAMMONIUM IODIDE**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:41 mg/kg UCPHAQ 2,161,44

ivn-mus LD50:5600 μ g/kg CSLNX* NX#00844**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal and intravenous routes. See also IODIDES. When heated to decomposition it emits very toxic fumes of NO_x , NH_3 , and I^- .**BFN125 CAS: 538-32-9 HR: 2**
BENZYLUREAmf: $C_8H_{10}N_2O$ mw: 150.20

PROP: Crystals. Mp: 147–148°, decomp at 200°. One gram dissolves in 60 mL warm water, 33 mL acetone; sltly sol in benzene, ether.

SYNS: BENZYL CARBAMIDE □ N-BENZYLUREA □ 1-BENZYLUREA □ PHENYLMETHYLUREA

TOXICITY DATA with REFERENCE:

orl-rat LD50:4410 mg/kg GISAAA 44(3),68,79

orl-mus LD50:570 mg/kg JMCMA 11,814,68

orl-rat LD50:2700 mg/kg GISAAA 44(3),68,79

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x.

**BFN500 CAS: 2086-83-1 HR: 3
BERBERINE**

mf: C₂₀H₁₈NO₄ mw: 336.39

PROP: White to yellow crystals. Mp (anhyd): 145°.

SYNS: BERBERIN □ 9,10-DIMETHOXY-2,3-(METHYLENEDIOXY)-7,8,13,13A-TETRAHYDROBERBINIUM

TOXICITY DATA with REFERENCE:

mmo-sat 100 μmol/L AMACCQ 9,77,76

dnd-esc 10 μmol/L MUREAV 89,95,81

orl-mus LD50:329 mg/kg YKKZAJ 82,726,62

scu-mus LD50:18 mg/kg RPTOAN 31,129,68

scu-rbt LDLo:100 mg/kg HBAMAK 4,1289,35

SAFETY PROFILE: An alkaloid poison by ingestion and subcutaneous routes. In humans, toxic doses lower the body temperature, increase peristalsis, and cause death by central paralysis. Mutation data reported. Should carry a poison label. Should never be ingested without the advice of a physician. Should not be handled excessively since it may be absorbed through the skin and have a toxic effect upon the body. An antimalarial agent. When heated to decomposition it emits highly toxic fumes of NO_x.

**BFN550 CAS: 5956-60-5 HR: 3
BERBERINE CHLORIDE DIHYDRATE**

mf: C₂₀H₁₈NO₄•Cl•2H₂O mw: 407.88

PROP: Yellow crystalline material.

SYNS: BERBERINE HYDROCHLORIDE BIHYDRATE □ 5,6-DIHYDRO-9,10-DIMETHOXYBENZO(g)-1,3-BENZO-DIOXOLO(5,6-a)QUINOLIZINIUM CHLORIDE DIHYDRATE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:138 mg/kg KSRNAM 8,654,74

scu-rat LD50:7970 mg/kg KSRNAM 8,654,74

ivn-rat LD50:46,200 μg/kg KSRNAM 8,654,74

ipr-mus LD50:30 mg/kg KSRNAM 8,654,74

scu-mus LD50:13,900 μg/kg KSRNAM 8,654,74

ivn-mus LD50:7600 μg/kg KSRNAM 8,654,74

SAFETY PROFILE: Poison by subcutaneous, intravenous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x. See also CHLORIDES.

**BFN600 CAS: 633-65-8 HR: 3
BERBERINE HYDROCHLORIDE**

mf: C₂₀H₁₈NO₄•Cl mw: 371.84

PROP: Yellow powder. Mp: 200°. Sol in cold water.

SYNS: BERBERINE CHLORIDE □ BERBINIUM, 7,8,13,13A-TETRADEHYDRO-9,10-DIMETHOXY-2,3-(METHYLENEDIOXY)-, CHLORIDE □ BENZO(g)(1,3)BENZODIOXOLO(5,6-a)QUINO

LIZINIUM,5,6-DIHYDRO-9,10-DIMETHOXY-, CHLORIDE (9CI) □ BERBERINIUM CHLORIDE

TOXICITY DATA with REFERENCE:

dnd-uns:lyms 22 μmol/L IJBBBQ 18,245,81

orl-rat LD50:>15 g/kg KSRNAM 8,654,74

orl-mus LD50:>29,586 mg/kg KSRNAM 8,654,74

ipr-mus LD50:37 mg/kg JPETAB 104,253,52

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal route. Slightly toxic by ingestion. Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

**BFN625 CAS: 316-41-6 HR: 3
BERBERINE SULFATE**

mf: C₄₀H₃₆N₂O₈•O₄S mw: 768.84

PROP: Off white to yellow powder.

SYNS: BERBERINE SULFATE (2:1) □ BERBERIN SULFATE □ 5,6-DIHYDRO-9,10-DIMETHOXY-BENZO(g)-1,3-BENZO-DIOXOLO(5,6-a)QUINOLIZINIUM SULFATE (2:1) □ NEUTRAL BERBERINE SULFATE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:26,400 μg/kg NIIRDN 6,770,82

scu-mus LD50:13,200 μg/kg NIIRDN 6,770,82

ivn-mus LD50:8200 μg/kg NIIRDN 6,770,82

SAFETY PROFILE: Poison by subcutaneous, intravenous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x and SO_x. See also SULFATES.

**BFN750 CAS: 6190-33-6 HR: 3
BERBERINE SULFATE TRIHYDRATE**

mf: C₄₀H₃₆N₂O₈•O₄S•3H₂O mw: 822.90

SYNS: 5,6-DIHYDRO-9,10-DIMETHOXYBENZO(g)-1,3-BENZO-DIOXOLO(5,6-a)QUINOLIZINIUM SULFATE TRIHYDRATE □ 7,8,13,13A-TETRADEHYDRO-9,10-DIMETHOXY-2,3-(METHYLENE DIOXY)BERBINIUM SULFATE TRIHYDRATE □ UMBELLATINE SULFATE TRIHYDRATE

TOXICITY DATA with REFERENCE:

scu-frg LDLo:20 mg/kg HBAMAK 4,1289,35

SAFETY PROFILE: Poison by subcutaneous route. See also BERBERINE and SULFATES. When heated to decomposition it emits very toxic SO_x and NO_x.

**BFN990 CAS: 68917-15-7 HR: 1
BERGAMOT MINT OIL**

PROP: Lemon like odor. Plant grows in England and Wales.

SYNS: OILS, MINT, MENTHA CITRATA □ MENTHA CITRATA OIL

TOXICITY DATA with REFERENCE:

orl-rat LD50:5 g/kg FCTOD7 30,73S,92

skn-gpg LD50:>5 g/kg FCTOD7 30,73S,92

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low toxicity by ingestion and skin contact. When heated to decomposition it emits acrid smoke and irritating vapors.

**BFO000 CAS: 8007-75-8 HR: 1
BERGAMOT OIL rectified**

PROP: Yellow-green liquid; agreeable odor. *Composition:* 1-linalyl acetate, 1-linalool, d-limonene, dipentene, bergaptene. By rectification of bergamot oil expressed, under vacuum, to remove completely the furocoumarins and other related nonvolatile residues; found in the fruit of citrus *Bergamia risso et poiteau* (Fam. *Rutaceae*) (FCTXAV 11,1011,73). D: 0.875–0.880 @ 25°/25°. Misc with alc, glacial acetic acid; sol in fixed oils; insol in glycerin, propylene glycol.

SYNS: BERGAMOTTE OEL (GERMAN) □ OIL OF BERGAMOT, coldpressed □ OIL OF BERGAMOT, rectified

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD FCTXAV 11,1035,73

orl-rat LD50:11,520 mg/kg PHARAT 14,435,59

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mildly toxic by ingestion. A mild skin irritant and allergen. Combustible. When heated to decomposition it emits acrid smoke and irritating fumes.

BFO100 CAS: 5956-63-8 HR: 2

BERGENIN HYDRATE

mf: $C_{14}H_{16}O_9 \cdot 7H_2O$ mw: 454.44

SYN: 2,4,4a,10b-TETRAHYDRO-3,4,8,10-TETRAHYDROXY-2-(HYDROXYMETHYL)-9-METHOXY-PYRANO(3,2-o)(2)BENZO PYRAN-6(2H)-ONE HYDRATE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:3040 mg/kg KSRNAM 9,1198,75

ivn-rat LD50:2800 mg/kg KSRNAM 9,1198,75

ipr-mus LD50:6410 mg/kg KSRNAM 9,1198,75

ivn-mus LD50:5400 mg/kg KSRNAM 9,1198,75

SAFETY PROFILE: Moderately toxic by several routes. Experimental reproductive effects. When heated to decomposition it emits acrid smoke and fumes.

BFO125 HR: 3

BERSAMA ABYSSINICA Fres. ssp.

ABYSSINICA, leaf extract

PROP: African plant belonging to the family Melianthaceae (JPPMAB 14,496,62).

TOXICITY DATA with REFERENCE:

orl-mus LD50:840 µg/kg JPPMAB 14,496,62

ipr-mus LD50:510 µg/kg JPPMAB 14,496,62

ivn-mky LD50:90 µg/kg JPPMAB 14,496,62

ivn-cat LD50:119 µg/kg JPPMAB 14,496,62

SAFETY PROFILE: Deadly poison by ingestion, intravenous, and intraperitoneal routes.

BFO250 CAS: 12161-82-9 HR: 3

BERTRANDITE

mf: $H_{10}O_9Si_2 \cdot H_2O \cdot Be_4$ mw: 264.34

PROP: Colorless, pale-yellow, orthorhombic crystals.

SYN: BERYLLIUM SILICATE HYDRATE

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Reported in EPA TSCA Inventory. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. See also BERYLLIUM and BERYLLIUM COMPOUNDS. When heated to decomposition it emits very toxic fumes of BeO.

BFO500 CAS: 1302-52-9 HR: 3
BERYL

mf: $Al_2O_3Si_6 \cdot 3Be$ mw: 537.53

PROP: Colorless, white, blue-green, green-yellow, yellow, or blue crystals. D: 2.63–2.91.

SYNS: BERYLLIUM ALUMINOSILICATE □ BERYLLIUM ALUMINUM SILICATE □ BERYL ORE

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Reported in EPA TSCA Inventory. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, neoplastic, and tumorigenic data. See also BERYLLIUM COMPOUNDS and SILICATES. When heated to decomposition it emits toxic fumes of BeO.

BFO750 CAS: 7440-41-7 HR: 3

BERYLLIUM

DOT: UN 1966/UN 1567

af: Be aw: 9.01

PROP: A silvery-white, relatively soft, lustrous metal, ductile at red heat. Unreactive to H₂O and air; dissolves vigorously in dil acids. Be reacts with aq alkalies or H₂. Mp: 1287–1292°, bp: 2970°, d: 1.85. IDLH 4 mg/m³ (as Be).

SYNS: BERYLLIUM-9 □ BERYLLIUM COMPOUNDS, n.o.s. (UN 1566) (DOT) □ BERYLLIUM, powder (UN 1567) (DOT) □ GLUCINIUM □ GLUCINIUM □ RCRA WASTE NUMBER P015

TOXICITY DATA with REFERENCE:

dnd-esc 30 µmol/L MUREAV 89,95,81

dni-nml-ivn 30 µmol/kg PHMCAA 12,298,70

dnd-hmn:hla 30 µmol/L MUREAV 89,95,81

dnd-mus:ast 30 µmol/L MUREAV 89,95,81

ihl-hmn TCLo:300 mg/m³:PUL AEHLAU 9,473,64

ivn-rat LD50:496 µg/kg LAINAW 15,176,66

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT

58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

DFG MAK: DFG TRK: Animal Carcinogen, Suspected Human Carcinogen. Grinding of beryllium metal and alloys: 0.005 mg/m³ calculated as beryllium in that portion of dust that can possibly be inhaled; other beryllium compounds: 0.002 mg/m³ calculated as beryllium in that portion of dust that can possibly be inhaled

NIOSH REL: CL not to exceed 0.0005 mg(Be)/m³

DOT CLASSIFICATION: 6.1; Label: Poison (UN 1566); DOT Class: 6.1; Label: Poison, Flammable Solid (UN 1567)

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. A deadly poison by intravenous route. Human systemic effects by inhalation: lung fibrosis, dyspnea, and weight loss. Human mutation data reported. See also BERYLLIUM COMPOUNDS. A moderate fire hazard in the form of dust or powder, or when exposed to flame or by spontaneous chemical reaction. Slight explosion hazard in the form of powder or dust. Incompatible with halocarbons. Reacts incandescently with fluorine or chlorine. Mixtures of the powder with CCl₄ or trichloroethylene will flash or spark on impact. When heated to decomposition in air it emits very toxic fumes of BeO. Reacts with Li and P.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Beryllium, 7102; Elements, 7300.

BFP000 CAS: 543-81-7 HR: 3
BERYLLIUM ACETATE

mf: C₄H₆O₄•Be mw: 127.11

PROP: Plates. Mp: decomp @ 300°.

SYN: BERYLLIUM ACETATE, NORMAL

TOXICITY DATA with REFERENCE:

ipr-rat LD50:317 mg/kg XEURAQ UR-70,1949

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

DFG MAK: Animal Carcinogen, Suspected Human Carcinogen

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. Poison by intraperitoneal route. See also BERYLLIUM COMPOUNDS. When heated to decomposition it emits toxic fumes of BeO.

BFP250 CAS: 12770-50-2 HR: 3
BERYLLIUM ALUMINUM ALLOY

PROP: Alloy is 62% beryllium and 38% aluminum (ENVRAL 21,63,80).

SYNS: ALUMINUM ALLOY, AlBe □ ALUMINUM BERYLLIUM ALLOY

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

DFG MAK: Animal Carcinogen, Suspected Human Carcinogen

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic and tumorigenic data. See also BERYLLIUM COMPOUNDS. When heated to decomposition it emits very toxic BeO.

BFP500 CAS: 66104-24-3 HR: 3
BERYLLIUM CARBONATE

mf: C₂H₂Be₃O₈ mw: 181.07

PROP: White powder. Decomposes >200°. Insol in water.

SYNS: BERYLLIUM CARBONATE, BASIC □ BERYLLIUMOXIDE CARBONATE □ BIS(CARBONATO(2-))DI-HYDROXYTRI BERYLLIUM

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Reported in EPA TSCA Inventory. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

DFG MAK: Animal Carcinogen, Suspected Human Carcinogen

NIOSH REL: CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. See also BERYLLIUM COMPOUNDS. When heated to decomposition it emits toxic BeO dust.

BFP750 CAS: 13106-47-3 HR: 3

BERYLLIUM CARBONATE (1:1)mf: $\text{CO}_3 \cdot \text{Be}$ mw: 69.02**PROP:** Insol in water. Decomposes in hot water.**SYN:** CARBONIC ACID BERYLLIUM SALT (1:1)**TOXICITY DATA with REFERENCE:**

ipr-gpg LDLo:300 mg/kg NIHBAZ 181,20,43

CONSENSUS REPORTS: IARC Cancer Review:

Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Reported in EPA TSCA Inventory. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³**ACGIH TLV:** TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)**DFG MAK:** 50 ppm (90 mg/m³)**NIOSH REL:** (Beryllium) CL not to exceed 0.0005 mg(Be)/m³**SAFETY PROFILE:** Confirmed carcinogen. Poison by intraperitoneal route. See also BERYLLIUM COMPOUNDS. When heated to decomposition it emits highly toxic fumes of BeO.**BF755 CAS: 1319-43-3 HR: 3**
BERYLLIUM CARBONATE BASIC**PROP:** White powder.**SYNS:** BASIC BERYLLIUM CARBONATE □ CARBONIC ACID, BERYLLIUM SALT, BASIC □ CARBONIC ACID, BERYLLIUM SALT, MIXTURE WITH BERYLLIUM HYDROXIDE**CONSENSUS REPORTS:** IARC Cancer Review:

Group 1 IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93.

SAFETY PROFILE: Confirmed human carcinogen. When heated to decomposition it emits toxic vapors of Be.**BFQ000 CAS: 7787-47-5 HR: 3**
BERYLLIUM CHLORIDEmf: BeCl_2 mw: 79.91**PROP:** Colorless, deliquescent needles, or orthorhombic crystals. Undergoes transition to high temp orthorhombic polymorph at 4°. Mp: 415°, bp: 520°, d: 1.899 @ 25°, vap press: 1 mm @ 291° (subl). Very sol in H₂O, EtOH, Et₂O, or Py; sltly sol in C₆H₆, CHCl₃, CS₂; insol in NH₃ or Me₂CO.**SYN:** BERYLLIUM DICHLORIDE**TOXICITY DATA with REFERENCE:**

mmo-esc 10 µmol/L MUREAV 126,9,84

msc-ham:lng 2 mmol/L MUREAV 68,259,79

orl-rat LD50:86 mg/kg HYSAAV 30,169,65

ipr-rat LD50:44 mg/kg EQSSDX 1,1,75

orl-mus LD50:92 mg/kg HYSAAV 30,169,65

ipr-mus LD50:106 mg/kg COREAF 256,1043,63

ipr-gpg LD50:50 mg/kg EQSSDX 1,1,75

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT

58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³**ACGIH TLV:** TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)**DFG MAK:** Animal Carcinogen, Suspected Human Carcinogen**NIOSH REL:** (Beryllium) CL not to exceed 0.0005 mg(Be)/m³**SAFETY PROFILE:** Confirmed carcinogen with experimental tumorigenic data. Poison by ingestion and intraperitoneal routes. An experimental teratogen. Other experimental reproductive effects. Mutation data reported. When heated to decomposition it emits very toxic fumes of BeO and Cl₂. See also BERYLLIUM COMPOUNDS and CHLORIDES.**BFQ500 HR: 3**
BERYLLIUM COMPOUNDS**PROP:** Pure beryllium is a hard, brittle, silvery metal. Mp: 1278°, bp: 2970°, d: 1.85. Beryllium oxide: white powder. Mp: 2530°, d: 3.0. Beryllium chloride: white to faintly yellow powder, deliquescent. Mp: 399°, bp: 482°. Beryllium fluoride: glassy, hygroscopic solid. Mp: 545°, d: 2.0. Beryllium nitrate: white to slightly yellow crystals. Mp: 60°. Beryllium sulfate: Mp: 550°.**CONSENSUS REPORTS:** IARC Cancer Review:

Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³**ACGIH TLV:** TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)**DFG MAK:** DFG TRK: Animal Carcinogen, Suspected Human Carcinogen. Grinding of beryllium metal and alloys: 0.005 mg/m³ calculated as beryllium in that portion of dust that can possibly be inhaled; other beryllium compounds: 0.002 mg/m³ calculated as beryllium in that portion of dust that can possibly be inhaled**SAFETY PROFILE:** Confirmed carcinogens. Beryllium compounds can enter the body through inhalation of dusts and fumes and may act locally on the skin. Even alloys of low beryllium content have been shown to be dangerous. In industry, inhalation of the dust can cause severe lung damage with symptoms appearing within months. Effects have been reported in persons living near processing plants and in families of beryllium workers. The fluoride, ammonium fluoride, sulfate, oxide, and hydroxide occur during extraction from beryllium ore.

Exposure to the oxide may occur in processing of beryllium alloys and beryllium ceramics.

The extraction of Be from its ore is attended by exposure to acid salts of the metal, particularly the fluoride (BeF_2), the ammonium fluoride and sulfate (BeSO_4), and also to beryllium oxide (BeO), and hydroxide [$\text{Be}(\text{OH})_2$]. Exposure to the oxide also occurs in the casting of beryllium alloys and in operations with beryllia ceramics. In the manufacture of fluorescent powders, lamps, and sign tubes, there may be exposure to beryllium carbonate and to more complex salts, such as ZnMnBe silicate. Exposure to beryllium compounds encountered in the extraction of the metal or its oxide from the ore, particularly the halide salts, has been attended, in certain individuals, by the development of dermatitis of an edematous and papulovesicular type, chronic skin ulcers, rhinitis, nasopharyngitis, epistaxis, bronchitis, and in severe cases, by the development of an acute pneumonitis, with cough, scanty sputum, low-grade fever, rales, dyspnea, and substernal pain. Radiographs show diffuse haziness throughout both lungs, followed by the appearance of soft, ill-defined opacities. The condition occurs while the worker is exposed, sometimes within 1 or 2 months of starting work, and recovery occurs within 2 months, as a rule, though radiographic changes sometimes persist for longer periods. Occasionally, recovery may not occur and lung fibrosis results. In severe cases of pneumonitis, the patient may die. Necropsies have revealed diffuse pulmonary edema, hemorrhagic extravasation, large numbers of plasma cells, and a relative absence of polymorphonuclear infiltration. On the basis of experimental work with animals, certain investigators are of the opinion that the acute upper and lower respiratory effects are due chiefly to the acid radical present in the dust or fume, but this view has little support. A delayed form of lung disease, characterized by the occurrence of granulomatous areas in the lung tissue, has been reported in workers manufacturing fluorescent powders, lamps, and sign tubes, casting beryllium master alloys, and producing beryllium from beryl ore. Symptoms can start during exposure, but they may be delayed up to 5 years or more after the last exposure. The commonest symptoms are coughing, shortness of breath, loss of appetite, loss of weight, and fatigue. Rales are usually present in the bases and axillae, and the red cell count is frequently elevated. Cyanosis is common, and the pulse and respiratory rates are often increased. Radiographically, three stages of the disease are described: (1) a diffuse, uniform granular shadowing extending throughout both lung fields; (2) a diffuse reticular pattern on the granular background; and (3) the appearance of distinct nodules scattered through the lungs, with some enlargement and blurring of the hilar shadows. The intensity of the shadowing is usually greater in the middle third of the lung fields. The prognosis is poor. Clinical improvement may occur gradually over a period of several years, but there appears to be little tendency for the radiographic shadowing to clear. In certain cases, the disease has progressed gradually for some months or years, with death resulting from respiratory and cardiac failure. In several instances necropsies have shown the presence of a diffuse fibrosis with coarse strands of hyalinized collagen between the alveoli and, in some places, replacing them. The

hyalinized areas contain granulomatous foci, the alveolar walls are thickened and fibrosed, the blood vessels being engorged and dilated. In some cases the hilar lymph nodes show granulomatous change and fibrosis. Granulomatous change has also been noted in the liver and hyaline fibrosis in the spleen. Two cases of delayed lung disease coming to autopsy have presented papular lesions on the dorsum of the hands; on the biopsy these showed "sarcoid-like" lesions with central necrosis.

Several cases have been reported in which localized granulomatous lesions developed following penetrating wounds caused by splinters of glass from broken fluorescent light tubes. Several weeks or months following the accident, swellings were noted in the injured areas and excision revealed granulomatous tumors, which in one case was shown to contain beryllium.

There is no specific treatment, but temporary remissions have been produced by ACTH and cortisone.

BFQ750 CAS: 12010-12-7 HR: 3
BERYLLIUM COMPOUND with NIOBIUM (12:1)

mf: Be_{12}Nb mw: 201.03

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 $\text{mg}(\text{Be})/\text{m}^3$; STEL 0.005 $\text{mg}(\text{Be})/\text{m}^3/30\text{M}$; CL 0.025 $\text{mg}(\text{Be})/\text{m}^3$

ACGIH TLV: TWA 0.002 $\text{mg}(\text{Be})/\text{m}^3$; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 $\text{mg}(\text{Be})/\text{m}^3$ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.005 $\text{mg}(\text{Be})/\text{m}^3$

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data. When heated to decomposition in air it emits very toxic fumes of BeO . See also BERYLLIUM COMPOUNDS and NIOBIUM.

BFR000 CAS: 12232-67-6 HR: 3
BERYLLIUM COMPOUND with TITANIUM (12:1)

mf: Be_{12}Ti mw: 156.02

SYN: TITANIUM compounded with BERYLLIUM (1:12)

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 $\text{mg}(\text{Be})/\text{m}^3$; STEL 0.005 $\text{mg}(\text{Be})/\text{m}^3/30\text{M}$; CL 0.025 $\text{mg}(\text{Be})/\text{m}^3$

ACGIH TLV: TWA 0.002 $\text{mg}(\text{Be})/\text{m}^3$; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 $\text{mg}(\text{Be})/\text{m}^3$ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.0005 $\text{mg}(\text{Be})/\text{m}^3$

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data. See also BERYLLIUM

COMPOUNDS and TITANIUM COMPOUNDS. When heated to decomposition it emits very toxic fumes of BeO.

BFR250 CAS: 12400-16-7 HR: 3
BERYLLIUM COMPOUND with VANADIUM (12:1)

mf: Be₁₂V mw: 159.06

SYN: VANADIUM compounded with BERYLLIUM (1:12)

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³; (REL to Vanadium) 1.0 mg(V)/m³

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data. See also BERYLLIUM COMPOUNDS and VANADIUM COMPOUNDS. When heated to decomposition it emits very toxic fumes of BeO and VO_x.

BFR300 CAS: 13510-48-0 HR: 3
BERYLLIUM DINITRATE TETRAHYDRATE

mf: Be•2HNO₃•4H₂O mw: 159.13

SYNS: BERYLLIUM NITRATE TETRAHYDRATE □ NITRIC ACID, BERYLLIUM SALT, TETRAHYDRATE

TOXICITY DATA with REFERENCE:

mic-bac-sat 500 µmol/L ENVRAL 36,379,85

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

DFG MAK: Animal Carcinogen, Suspected Human Carcinogen

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed human carcinogen. Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x and Be.

BFR500 CAS: 7787-49-7 HR: 3
BERYLLIUM FLUORIDE

mf: BeF₂ mw: 47.01

PROP: Amorphous, colorless, hexagonal crystals.

Undergoes transition from low temp quartz to high-temp quartz structure types at 2°. Readily forms glass. Mp: 552°, d: 1.986 @ 25°. Subl @ 8°. Very sol in H₂O; sltly sol in EtOH.

SYN: BERYLLIUM DIFLUORIDE

TOXICITY DATA with REFERENCE:

orl-rat LD50:98 mg/kg XEURAQ UR-154,1951

orl-mus LD50:100 mg/kg XPHPAW 2173,23,72

scu-mus LD50:20 mg/kg XPHPAW 2173,23,72

ivn-mus LD50:1800 µg/kg XPHPAW 2173,23,72

ipr-ham LD50:21 mg/kg XEURAQ UR-154,1951

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen); TWA 2.5 mg(F)/m³; BEI: 3 mg/g creatinine of fluorides in urine prior to shift; 10 mg/g creatinine of fluorides in urine at end of shift.

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic and tumorigenic data by inhalation. Poison by ingestion, subcutaneous, intravenous, and intraperitoneal routes. See also BERYLLIUM COMPOUNDS and FLUORIDES. Incompatible with Mg. When heated to decomposition, it emits very toxic fumes of BeO and F⁻.

BFR750 CAS: 7787-52-2 HR: 3
BERYLLIUM HYDRIDE

mf: BeH₂ mw: 11.03

PROP: White solid.

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen); TWA 2.5 mg(F)/m³; BEI: 3 mg/g creatinine of fluorides in urine prior to shift; 10 mg/g creatinine of fluorides in urine at end of shift.

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. A dangerous fire hazard. When heated to 220°C it liberates explosive hydrogen gas. Reacts violently with methanol, water, and dilute acids. When heated to decomposition it emits toxic fumes of BeO. See BERYLLIUM COMPOUNDS and HYDRIDES.

BFS000 CAS: 13598-15-7 HR: 3

BERYLLIUM HYDROGEN PHOSPHATE (1:1)mf: BeHO_4P mw: 104.99**SYNS:** BERYLLIUM PHOSPHATE □ PHOSPHORIC ACID, BERYLLIUM SALT (1:1) □ PHOSPHOROUS ACID, BERYLLIUM SALT**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:16 mg/kg TXAPA9 24,497,73

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.**OSHA PEL:** TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³**ACGIH TLV:** TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)**NIOSH REL:** (Beryllium) CL not to exceed 0.0005 mg(Be)/m³**SAFETY PROFILE:** Confirmed carcinogen with experimental carcinogenic and tumorigenic data. Poison by intravenous route. See also BERYLLIUM COMPOUNDS and PHOSPHATES. When heated to decomposition it emits very toxic fumes of BeO and PO_x.**BFS250 CAS: 13327-32-7 HR: 3****BERYLLIUM HYDROXIDE**mf: $\text{H}_2\text{O}_2\cdot\text{Be}$ mw: 43.03**PROP:** Colorless, orthorhombic, amorphous powder or crystals. Decomp on heating with H₂O loss forming BeO. Mp: decomp @ 138°. Practically insol in H₂O.**SYNS:** BERYLLIUM DIHYDROXIDE □ BERYLLIUM HYDRATE**TOXICITY DATA with REFERENCE:**

ivn-rat LDLo:3821 µg/kg XEURAQ UR-70,1949

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.**OSHA PEL:** TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³**ACGIH TLV:** TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)**NIOSH REL:** (Beryllium) CL not to exceed 0.0005 mg(Be)/m³**SAFETY PROFILE:** Confirmed carcinogen with experimental carcinogenic and tumorigenic data. Poison by intravenous route. See also BERYLLIUM COMPOUNDS. When heated to decomposition it emits very toxic fumes of BeO.**BFS750 HR: 3****BERYLLIUM MANGANESE ZINC SILICATE**mf: $\text{BeMnO}_4\text{SiZn}$ mw: 221.41**SYNS:** MANGANESE ZINC BERYLLIUM SILICATE □ ZINC MANGANESE BERYLLIUM SILICATE**CONSENSUS REPORTS:** IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium, manganese, zinc, and their compounds are on the Community Right-To-Know List.**OSHA PEL:** TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³**ACGIH TLV:** TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)**NIOSH REL:** (Beryllium) CL not to exceed 0.0005 mg(Be)/m³**SAFETY PROFILE:** Confirmed carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of BeO and ZnO. See also BERYLLIUM COMPOUNDS, MANGANESE COMPOUNDS, and ZINC COMPOUNDS.**BFT000 CAS: 13597-99-4 HR: 3****BERYLLIUM NITRATE****DOT:** UN 2464mf: BeN_2O_6 mw: 133.03**PROP:** Deliquescent, white, amorphous solid or white-yellowish crystals. Mp: 60°, bp: decomp @ 100–200°.**SYNS:** BERYLLIUM DINITRATE □ NITRIC ACID, BERYLLIUM SALT**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:3160 µg/kg CUSCAM 55,899,86

ipr-mus LD50:500 µg/kg EQSSDX 1,1,75

scu-mus LDLo:50 mg/kg RDWU** -,30

ipr-gpg LDLo:100 mg/kg EQSSDX 1,1,75

scu-frg LDLo:1041 mg/kg RDWU** -,30

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.**OSHA PEL:** TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³**ACGIH TLV:** TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)**NIOSH REL:** CL not to exceed 0.0005 mg(Be)/m³**DOT CLASSIFICATION:** 5.1; Label: Oxidizer, Poison**SAFETY PROFILE:** Confirmed carcinogen. Poison by intraperitoneal, intravenous, and subcutaneous routes. Experimental reproductive effects. When heated to decomposition it emits very toxic fumes of BeO and NO_x. See also BERYLLIUM COMPOUNDS and NITRATES.**BFT100 CAS: 7787-55-5 HR: 3****BERYLLIUM NITRATE TRIHYDRATE**mf: $\text{Be}\cdot 2\text{NO}_3\cdot 3\text{H}_2\text{O}$ mw: 139.09

SYN: NITRIC ACID, BERYLLIUM SALT, TRIHYDRATE

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

DFG MAK: Animal Carcinogen, Suspected Human Carcinogen

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed human carcinogen. When heated to decomposition it emits toxic vapors of NO_x and Be.

**BFT250 CAS: 1304-56-9 HR: 3
BERYLLIUM OXIDE**

mf: BeO mw: 25.01

PROP: White, amorphous powder or white, hexagonal crystals; piezoelectric and pyroelectric. Undergoes hexagonal to tetragonal transition at 21°. Mp: 2507°, bp: 3900° (approx), d: 3.025. Dissolves in conc H₂SO₄ and in fused KOH. Sltly sol in H₂O.

SYNS: BERYLLIA □ BERYLLIUM MONOXIDE □ THERMALOX

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data. Experimental teratogenic data. Other experimental reproductive effects. See also BERYLLIUM COMPOUNDS. Incompatible with (Mg + heat). When heated to decomposition it emits very toxic fumes of BeO.

**BFT500 CAS: 19049-40-2 HR: 3
BERYLLIUM OXYACETATE**

mf: C₁₂H₁₈Be₄O₁₃ mw: 406.34

PROP: Colorless cubic crystals from CHCl₃. Undergoes cubic to orthorhombic transition at 1°. Mp: 284°, bp: 331°. Sol in CHCl₃, AcOH; sltly sol in EtOH and Et₂O.

SYNS: BERYLLIUM ACETATE, BASIC □ BERYLLIUM OXIDE ACETATE □ HEXAKIS(μ-ACETATO-O-O)-μ⁴-OXOTETRA BERYLLIUM □ HEXAKIS(μ-ACETATO)-μ⁴-OXOTETRA BERYLLIUM

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. See BERYLLIUM COMPOUNDS. When heated to decomposition it emits toxic fumes of BeO.

**BFT750 CAS: 63990-88-5 HR: 3
BERYLLIUM OXYFLUORIDE**

mf: BeF₂O₂ mw: 79.01

TOXICITY DATA with REFERENCE:

orl-rat LD50:146 mg/kg XEURAQ UR-154,1951

scu-mus LDLo:5 mg/kg BJEPAS 30,375,49

ivn-mus LDLo:3500 μg/kg BJEPAS 30,375,49

ipr-gpg LDLo:10 mg/kg NIHBAZ 181,20,43

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. Poison by ingestion, subcutaneous, intravenous, and intraperitoneal routes. See also BERYLLIUM COMPOUNDS and FLUORIDES. When heated to decomposition it emits very toxic fumes of BeO and F⁻.

**BFU000 CAS: 13597-95-0 HR: 3
BERYLLIUM PERCHLORATE**

mf: Be(ClO₄)₂ mw: 207.91

PROP: Very hygroscopic crystals, sol in water: 148.6 g/100 mL.

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. A powerful oxidant used in propellant and igniter systems. When heated to decomposition it emits toxic fumes of Cl and BeO. See also BERYLLIUM COMPOUNDS and PERCHLORATES.

**BFU250 CAS: 13510-49-1 HR: 3
BERYLLIUM SULFATE (1:1)**

mf: O₄S•Be mw: 105.07

PROP: Colorless, tetragonal, hygroscopic crystals. Undergoes polymorphic transitions at 5° and 6°. On further heating dissociates without melting to BeO, SO₃, SO₂, and O₂ crystals. Mp: 550–600° (decomp), d: 2.443. Insol in H₂O.

SYN: SULFURIC ACID, BERYLLIUM SALT (1:1)

TOXICITY DATA with REFERENCE:

mrc-bcs 10 mmol/L MUREAV 77,109,80
otr-mus:fbr 200 µg/L JJIND8 67,1303,81
orl-rat LD50:82 mg/kg HYSAAV 30,169,65
ihl-rat LCLo:10 mg/m³ EQSSDX 1,1,75
ipr-rat LDLo:18 mg/kg XPHPAW 2173,23,72
scu-rat LD50:1500 µg/kg XPHPAW 2173,23,72
ivn-rat LD50:7200 µg/kg XPHPAW 2173,23,72
itr-rat LDLo:10 mg/kg XPHPAW 2173,23,72
orl-mus LD50:80 mg/kg HYSAAV 30,169,65
ihl-mus LCLo:47 mg/m³ EQSSDX 1,1,75
ipr-mus LD50:1200 mg/kg JJIND8 62,911,79
scu-mus LD50:1500 µg/kg XPHPAW 2173,23,72
ivn-mus LD50:500 µg/kg XPHPAW 2173,23,72
ivn-dog LDLo:600 µg/kg XPHPAW 2173,23,72

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data. Acute poison by inhalation, ingestion, intraperitoneal, subcutaneous, intravenous, and intratracheal routes. See also BERYLLIUM COMPOUNDS and SULFATES. Mutation data reported. When heated to decomposition it emits very toxic fumes of SO_x and BeO.

**BFU500 CAS: 7787-56-6 HR: 3
BERYLLIUM SULFATE TETRAHYDRATE (1:1:4)**

mf: O₄S•Be•4H₂O mw: 177.15

PROP: Colorless, tetragonal crystals. Decompose on heating with H₂O loss. Very soluble in H₂O.

SYNS: BERYLLIUM SULPHATE TETRAHYDRATE □ SULFURIC ACID, BERYLLIUM SALT (1:1), TETRAHYDRATE

TOXICITY DATA with REFERENCE:

mma-sat 3300 ng/plate ENMUDM 6(Suppl 2),1,84
sce-hmn:lym 1 mg/L ENMUDM 3,597,81
ivn-mus LD50:4971 µg/kg TXAPA9 24,497,73

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic data by inhalation. Deadly poison by subcutaneous and intravenous routes. Human mutation data reported. See also BERYLLIUM COMPOUNDS and SULFATES. When heated to decomposition it emits very toxic fumes of BeO and SO_x.

**BFU750 HR: 3
BERYLLIUM TETRAHYDROBORATE**

mf: B₂BeH₈ mw: 38.70

Be(BH₄)₂

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. Ignites and then explodes in air or on contact with water. Upon decomposition it emits toxic fumes of BeO and BO_x. See also BERYLLIUM COMPOUNDS and BORON COMPOUNDS.

**BFV000 HR: 3
BERYLLIUM TETRAHYDROBORATE TRI-METHYLAMINE**

mf: C₃H₁₇B₂BeN mw: 97.78

Be(BH₄(2•N(CH₃)₃))

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT

58,41,93. Beryllium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen. It will ignite in contact with air or water. When heated to decomposition it emits toxic fumes of BeO, BO_x, and NO_x. See also BERYLLIUM COMPOUNDS and BORON COMPOUNDS.

BFV250 CAS: 39413-47-3 HR: 3

BERYLLIUM ZINC SILICATE

mf: O₂Si•Zn•Be mw: 134.47

SYN: ZINC BERYLLIUM SILICATE

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 58,41,93; Human Sufficient Evidence IMEMDT 58,41,93; Animal Sufficient Evidence IMEMDT 1,17,72; Animal Sufficient Evidence IMEMDT 23,143,80; Animal Sufficient Evidence IMEMDT 58,41,93. Beryllium and its compounds, as well as zinc and its compounds, are on the Community Right-To-Know List.

OSHA PEL: TWA 0.002 mg(Be)/m³; STEL 0.005 mg(Be)/m³/30M; CL 0.025 mg(Be)/m³

ACGIH TLV: TWA 0.002 mg(Be)/m³; Confirmed Human Carcinogen; (Proposed: TWA 0.0002 mg(Be)/m³ (sensitizer); Confirmed Human Carcinogen)

NIOSH REL: (Beryllium) CL not to exceed 0.0005 mg(Be)/m³

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of BeO and ZnO. See also BERYLLIUM COMPOUNDS, ZINC COMPOUNDS, and SILICATES.

BFV300 CAS: 58970-76-6 HR: 3

BESTATIN

mf: C₁₆H₂₄N₂O₄ mw: 308.42

PROP: Needles. Mp: 233–236°.

SYNS: 3-(R)-AMINO-2-(S)-HYDROXY-4-PHENYLBUTANOYL-(2)-LEUCINE □ (S-(4*,S*))-(N-(3-AMINO-2-HYDROXY-1-OXO-4-PHENYLBUTYL)-L-LEUCINE □ NK 421

TOXICITY DATA with REFERENCE:

ipr-rat LD50:780 mg/kg JJANAX 36,2971,83

scu-rat LD50:1900 mg/kg JJANAX 36,2971,83

ipr-mus LD50:190 mg/kg JJANAX 36,2971,83

scu-mus LD50:1300 mg/kg JJANAX 36,2971,83

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by subcutaneous route. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.

BFV325 CAS: 75219-46-4 HR: D

BESTRABUCIL

mf: C₄₁H₄₇Cl₂NO₆ mw: 720.79

PROP: Crystals.

SYN: KM 2210

TOXICITY DATA with REFERENCE:

dni-hmn:hlas 5 mg/L KSRNAM 20,1974,86

oth-hmn:hlas 50 mg/L KSRNAM 20,1974,86

SAFETY PROFILE: An experimental teratogen. Other experimental reproductive effects. Human mutation data reported. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x.

BFV350 CAS: 54856-23-4 HR: 3

BETAHISTINE MESYLATE

mf: C₈H₁₂N₂•2CH₄O₃S mw: 328.44

SYNS: BETAHISTINE MESILATE □ N-METHYL-2-PYRIDINE ETHANAMINE DIMETHANESULFONATE

TOXICITY DATA with REFERENCE:

orl-rat LD50:3030 mg/kg NIIRDN 6,750,82

scu-rat LD50:940 mg/kg NIIRDN 6,750,82

ivn-rat LD50:604 mg/kg NIIRDN 6,750,82

orl-mus LD50:500 mg/kg NIIRDN 6,750,82

scu-mus LD50:1630 mg/kg NIIRDN 6,750,82

ivn-mus LD50:505 mg/kg NIIRDN 6,750,82

orl-gpg LD50:1400 mg/kg NIIRDN 6,750,82

scu-gpg LD50:120 mg/kg NIIRDN 6,750,82

ivn-gpg LD50:22,900 µg/kg NIIRDN 6,750,82

SAFETY PROFILE: Poison by subcutaneous route. Moderately toxic by ingestion and other routes. When heated to decomposition it emits toxic fumes of NO_x and SO_x.

BFV750 CAS: 378-44-9 HR: 1

BETAMETHASONE

mf: C₂₂H₂₉FO₅ mw: 392.51

SYNS: BETNELAN □ BETSOLAN □ CELESTONE □ 9-α-FLUORO-16-β-METHYLPREDNISOLONE □ 9-α-FLUORO-16-β-METHYL-1,4-PREGNADIENE-11-β,17-α,21-TRIOL-3,20-DIONE □ 9-FLUORO-11-β,17,21-TRIHYDROXY-16-β-METHYLPREGNA-1,4-DIENE-3,20-DIONE □ 9-α-FLUORO-11-β,17,21-TRIHYDROXY-16-β-METHYLPREGNA-1,4-DIENE-3,20-DIONE □ 16-β-METHYL-1,4-PREGNADIENE-9-α-FLUORO-11-β,17-α,21-TRIOL-3,20-DIONE □ NSC-39470 □ Sch 4831

TOXICITY DATA with REFERENCE:

orl-mus LD50:>4500 mg/kg YAKUD5 21,2117,79

SAFETY PROFILE: Low toxicity by ingestion. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of F⁻.

BFV755 HR: D

BETAMETHASONE ACETATE and BETAMETHASONE PHOSPHATE

mf: C₂₄H₃₁FO₆•C₂₂H₃₀FO₃P mw: 907.04

SYNS: BETAMETHASONE PHOSPHATE and BETAMETHASONE ACETATE □ CELESTONE SOLUSPAN □ PREGNA-1,4-DIENE-3,20-DIONE, 9-FLUORO-11-β,17,21-TRIHYDROXY-16-β-METHYL-, 21-ACETATE and 9-FLUORO-11-β,17,21-TRIHYDROXY-16-β-METHYL-PREGNA-1,4-DIENE-3,20-DIONE 21-(DIHYDROGEN PHOSPHATE)

SAFETY PROFILE: An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of F⁻ and PO_x.

BFV760 CAS: 22298-29-9 HR: 3

BETAMETHASONE BENZOATE

mf: C₂₉H₃₃FO₆ mw: 496.62**SYNS:** BETAMETHASONE 17-BENZOATE □
BETHAMETHASONE 17-BENZOATE □ MS-1112**TOXICITY DATA with REFERENCE:**

scu-rat LD50:194 mg/kg TXAPA9 8,250,66

SAFETY PROFILE: Poison by subcutaneous route. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of F⁻.**BFV765 CAS: 5593-20-4 HR: 3
BETAMETHASONE DIPROPIONATE**mf: C₂₈H₃₇FO₇ mw: 504.65**PROP:** Powder. Mp: 170–179° (decomp).**SYNS:** BETAMETHASONE 17,21-DIPROPIONATE □
DIPROSONE □ 9-FLUORO-11-β,17,21-TRIHYDROXY-16-β-METHYLPREGNA-1,4-DIENE-3,20-DIONE, 17,21-DIPROPIONATE □ S-3440**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:103 mg/kg NIIRDN 6,753,82

scu-mus LD50:78,100 µg/kg NIIRDN 6,753,82

SAFETY PROFILE: Poison by subcutaneous and intraperitoneal routes. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of F⁻.**BFV770 CAS: 151-73-5 HR: 2
BETAMETHASONE DISODIUM PHOSPHATE**mf: C₂₂H₃₀FO₈P•2Na mw: 518.47**SYNS:** BETAMETHASONE-21-DISODIUM PHOSPHATE □
BETAMETHASONE SODIUM PHOSPHATE □ BETNESOL □ 9-FLUORO-11-β,17,21-TRIHYDROXY-16-β-METHYLPREGNA-1,4-DIENE-3,20-DIONE, 21-(DIHYDROGEN PHOSPHATE), DISODIUM SALT**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1877 mg/kg DRUGAY -,1075,90

ipr-rat LD50:1179 mg/kg DRUGAY -,1075,90

ivn-rat LD50:1276 mg/kg YAKUD5 21,2117,79

orl-mus LD50:1607 mg/kg SKIZAB 29,153,73

ipr-mus LD50:1166 mg/kg SKIZAB 29,153,73

scu-mus LD50:1363 mg/kg SKIZAB 29,153,73

SAFETY PROFILE: Moderately toxic by ingestion and other routes. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of F⁻, PO_x and Na₂O.**BFV900 CAS: 37717-82-1 HR: 3
BETANIDINE SULFATE**mf: C₁₈H₁₄N₂O₈•7H₂O•S mw: 1072.90**SYNS:** BETANIDIN SULFATE □ 2-CARBOXY-1-((2,6-DICARBOXY-2,3-DIHYDRO-4(1H)-PYRIDINYLDIENE)ETHYLDIENE)5,6-DIHYDROXY-1H-INDOLIUM, HYDROXIDE, INNER SALT, SULFATE (SALT)**TOXICITY DATA with REFERENCE:**

orl-rat LD50:3142 mg/kg NIIRDN 6,750,82

ipr-rat LD50:135 mg/kg NIIRDN 6,750,82

scu-rat LD50:681 mg/kg NIIRDN 6,750,82

orl-mus LD50:1059 mg/kg NIIRDN 6,750,82

ipr-mus LD50:170 mg/kg NIIRDN 6,750,82

scu-mus LD50:398 mg/kg NIIRDN 6,750,82

SAFETY PROFILE: Poison by subcutaneous and intraperitoneal routes. Moderately toxic by ingestion.When heated to decomposition it emits toxic fumes of SO_x and NO_x. See also SULFATES.**BFV975 HR: 2
BETEL LEAVES****CONSENSUS REPORTS:** IARC Cancer Review: Animal Inadequate Evidence IMEMDT 37,141,85**SAFETY PROFILE:** Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic and irritating fumes.**BFW000 HR: 3
BETEL NUT****PROP:** Mottled brown with fawn color. Extract of 50 g sun-dried betel nut in 100 mL boiling water (IJCNAW 17,469,76).**SYNS:** ARECA CATECHU □ ARECA CATECHU Linn., fruit extract □ ARECA CATECHU Linn., nut extract □ BN □ PINANG □ POOGIPHALAM, nut extract □ SUPARI, nut extract**TOXICITY DATA with REFERENCE:**

mnt-mus-ipr 1600 mg/kg CRNGDP 5,501,84

sce-mus-ipr 62,500 µg/kg/5D-C CRNGDP 7,37,86

msc-ham:lng 5 mg/L CRNGDP 5,501,84

ipr-mus LD50:681 mg/kg IJEBA6 18,594,80

CONSENSUS REPORTS: IARC Cancer Review: Animal Limited Evidence IMEMDT 37,141,85.**SAFETY PROFILE:** Suspected carcinogen with experimental carcinogenic and neoplastigenic data. Moderately toxic by intraperitoneal route. Experimental teratogenic and reproductive effects. When heated to decomposition it emits toxic fumes of NO_x. See also ARECA NUT, other betel entries, and SMOKELESS TOBACCO.**BFW010 CAS: 89957-52-8 HR: 2
BETEL NUT, polyphenol fraction****SYN:** POLYPHENOL FRACTION OF BETEL NUT**SAFETY PROFILE:** Questionable carcinogen with experimental carcinogenic and tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes.**BFW050 HR: 2
BETEL NUT TANNIN****SYN:** TANNIN from BETEL NUT**TOXICITY DATA with REFERENCE:**

sce-mus-ipr 1500 mg/kg/15D C CRNGDP 7,37,86

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic and irritating fumes.**BFW120 HR: 3
BETEL QUID****PROP:** Composed of Areca nut, lime, catechu, and possibly tobacco and spices wrapped in a betel leaf. Used throughout the Orient and many Pacific islands, it is chewed in a manner similar to chewing tobacco. The major ingredients are:ARECA NUT (betel nut, supari in India) is the fruit of the areca palm (*Areca catechu* L.). The ripe, orange-

yellow nut is separated from its fibrous pericarp and may be cured in boiling water and then dried.

BETEL LEAF comes from the Betel vine (*Piper betle* L.).

LIME (chuna or chunam in India) is prepared from seashells or quarried stone and mixed with water (slaked) to release calcium hydroxide.

CATECHU (kattha in India) is a resinous extract from the heartwood of the Acacia tree (*A. catechu* or *A. suma*).

TOBACCO is the leaf from the tobacco plant (*N. rustica* or *N. Tabacum*).

SPICES and flavorings, such as cardamom, cloves, grated fresh coconut, and sugar, are sometimes added.

SYN: PAN

SAFETY PROFILE: The areca nut contains several alkaloids which are the primary cause of habituation. The most abundant alkaloid is arecoline which mimics the action of acetylcholine and acts as a stimulant.

Betel quid toxicity is due to the presence of areca nut alkaloids, nitrosamines derived from these compounds, polyphenols, and, when used, tobacco specific nitrosamines. Several nitrosamines derived from areca nut alkaloids have been found in the saliva of quid chewers: N-nitrosoguvacoline, N-nitrosoproline, N'-nitrosanornicotine, N'-nitrosoanatabine and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone. Users of betel quid with tobacco also have nitrosamines derived from tobacco alkaloids in their saliva. Catechu has a high percentage of polyphenols such as kaempferol, dihydroxykaempferol, taxifolin, isorhamnetin, (+)afzelchin, dimeric procyanidin and (-)epicatechin. Many nitrosamines have been shown to be experimental carcinogens.

There is sufficient evidence that betel quid with tobacco is carcinogenic to humans. There is inadequate evidence that betel quid without tobacco is carcinogenic to humans. There is limited evidence that extracts of betel quid with and without tobacco are carcinogenic to experimental animals. There is limited evidence that areca nut with and without tobacco is carcinogenic to experimental animals. Extracts from the areca nut are mutagenic. Chewing the quid may cause mouth ulcerations and periodontal disease. There is a high incidence of oral leukoplakia (a precancerous lesion) in betel quid users.

See also specific compounds; ARECA NUT, other betel entries, SMOKELESS TOBACCO, N-NITROSO COMPOUNDS, and NITROSAMINES.

BFW125

HR: 2

BETEL QUID EXTRACT

TOXICITY DATA with REFERENCE:

dni-hmn:lym 25,000 ppm CNREA8 39,480,79

dni-rat:mmr 25,000 ppm CNREA8 39,480,79

dni-mus:fbr 25,000 ppm CNREA8 39,480,79

CONSENSUS REPORTS: IARC Cancer Review: Human Inadequate Evidence IMEMDT 37,141,85; Animal Limited Evidence IMEMDT 37,141,85.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic and tumorigenic data by skin contact. Human mutation data reported. See other betel entries.

BFW135

HR: 3

BETEL TOBACCO EXTRACT

SYN: JAFFNA TOBACCO

TOXICITY DATA with REFERENCE:

sce-hmn:lym 10 mg/L TOLED5 8,17,81

mnt-mus:ipr 24 mg/kg CRNGDP 5,501,84

otr-ham:emb 50 mg/L TOLED5 8,17,81

msc-ham:lng 5 mg/L CRNGDP 5,501,84

CONSENSUS REPORTS: IARC Cancer Review: Human Sufficient Evidence IMEMDT 37,141,85; Animal Limited Evidence IMEMDT 37,141,85.

SAFETY PROFILE: Confirmed human carcinogen. Human mutation data reported. See also SMOKELESS TOBACCO and other betel entries.

BFW250

CAS: 114-85-2

HR: 3

BETHANIDINE SULFATE

mf: C₂₀H₃₀N₆•H₂O₄S mw: 452.64

PROP: Solid. Mp: 289–290° (decomp).

SYNS: BATEL □ BENTANIDOL □ BENZALDIN □ BENZANIDINE □ BENZOXINE □ 1-BENZYL-2,3-DIMETHYL-GUANIDINE SULFATE (1:1/2) □ N-BENZYL-N',N"-DIMETHYL-GUANIDINE SULFATE □ BETALING □ BETANID OLE □ BETHANID □ BETHANIDINE, HEMISULFATE □ BW 467-C-60 □ 467-C-60 □ N,N-DIMETHYL-(PHENYLMETHYL) GUANIDINE SULPHATE (2:1) □ ESBATAL □ ESTABAL □ EUSMANID □ HYPERSIN □ NSC-106563 □ REGULIN □ TENATHAN

TOXICITY DATA with REFERENCE:

ivn-rat LD50:20 mg/kg NYKZAU 72,837,76

orl-mus LD50:520 mg/kg BJPCAL 20,36,63

ipr-mus LD50:150 mg/kg BJPCAL 20,36,63

scu-mus LD50:260 mg/kg BJPCAL 20,36,63

ivn-mus LD50:12 mg/kg BJPCAL 20,36,63

ivn-ckn LDLo:100 mg/kg BJPCAL 20,36,63

SAFETY PROFILE: Poison by intraperitoneal, subcutaneous, and intravenous routes. Moderately toxic by ingestion. See also SULFATES. When heated to decomposition it emits toxic fumes of NO_x and SO_x.

BFW325

CAS: 312-93-6

HR: D

BETNELAN PHOSPHATE

mf: C₂₂H₃₀FO₈P mw: 472.49

SYNS: DEXAMETHASONE-21-ORTHOPHOSPHATE □ DEXAMETHASONE PHOSPHATE □ DEXAMETHASONE-21-PHOSPHATE □ NEODECADRON □ ORADEXON PHOSPHATE □ WYMESONE

TOXICITY DATA with REFERENCE:

dni-rat-ipr 3 mg/kg JOENAK 62,527,74

SAFETY PROFILE: An experimental teratogen. Other experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of F⁻ and PO_x.

BFW400

CAS: 42864-78-8

HR: 3

BEVANTOLOL HYDROCHLORIDE

mf: C₂₀H₂₇NO₄•ClH mw: 381.94

SYNS: CI 775 □ 1-((3,4-DIMETHOXYPHENETHYL)AMINO)-3-(m-TOLYLOXY)-2-PROPANOL HYDROCHLORIDE □ 2-PROPANOL, 1-((3,4-DIMETHOXYPHENETHYL)AMINO)-3-(m-TOLYLOXY)-, MONOHYDROCHLORIDE □ 2-PROPANOL, 1-((2-(3,4-DIMETHOXYPHENYL)ETHYL)AMINO)-3-(3-METHYL-PHENOXY)-, HCL

TOXICITY DATA with REFERENCE:

orl-rat LD50:460 mg/kg IYKEDH 26,364,1995
 ipr-rat LD50:130 mg/kg IYKEDH 26,364,1995
 ivn-rat LD50:25,100 µg/kg IYKEDH 26,364,1995
 orl-mus LD50:419 mg/kg NCDREP 3,85,1985
 orl-dog LD50:436 mg/kg YAKUD5 37,1835,1995

SAFETY PROFILE: A poison by intraperitoneal and intravenous route. Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x, HCl, and Cl⁻.

BFW500 CAS: 319-86-8 HR: 2

Δ-BHC

mf: C₆H₆Cl₆ mw: 290.82

PROP: Solid. Mp: 129–132°.

SYNS: Δ-BENZEHEXACHLORIDE □ ENT 9,234 □ 1-α,2-α,3-α,4-β,5-α,6-β-HEXACHLOROCYCLOHEXANE □ Δ-HEXACHLORO CYCLOHEXANE □ Δ-1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE □ Δ-LINDANE

TOXICITY DATA with REFERENCE:

orl-rat LD50:1000 mg/kg ARSIM* 20,5,66

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of Cl⁻. See also CHLORINATED HYDROCARBONS, ALIPHATIC.

BFW750 CAS: 128-37-0 HR: 2

BHT (food grade)

mf: C₁₅H₂₄O mw: 220.39

PROP: White, crystalline solid; faint characteristic odor. Bp: 265°, fp: 68°, flash p: 260°F (TOC), d: 1.048 @ 20°/4°, vap d: 7.6, mp: 71°. Sol in alc; insol in water and propylene glycol.

SYNS: ADVASTAB 401 □ AGIDOL □ ANTIOXIDANT DBPC □ ANTIOXIDANT 29 □ AO 29 □ AO 4K □ 2,6-BIS(1,1-DIMETHYLETHYL)-4-METHYLPHENOL □ BUKS □ BUTYLATED HYDROXY TOLUENE □ BUTYLHYDROXYTOLUENE □ CAO 1 □ CAO 3 □ CATALIN CAO-3 □ CHEMANOX 11 □ DBMP □ DBPC (technical grade) □ DIBUTYLATED HYDROXYTOLUENE □ 2,6-DI-tert-BUTYL-p-CRESOL (OSHA, ACGIH) □ 2,6-DI-tert-BUTYL-1-HYDROXY-4-METHYLBENZENE □ 3,5-DI-tert-BUTYL-4-HYDROXYTOLUENE □ 2,6-DI-tert-BUTYL-p-KRESOL (CZECH) □ 2,6-DI-tert-BUTYL-p-METHYLPHENOL □ 2,6-DI-tert-BUTYL-4-METHYLPHENOL □ FEMA No. 2184 □ 4-HYDROXY-3,5-DI-tert-BUTYL TOLUENE □ IMPRUVOL □ IONOL □ IONOL (antioxidant) □ 4-METHYL-2,6-DI-tert-BUTYLPHENOL (CZECH) □ METHYL-DI-tert-BUTYLPHENOL □ 4-METHYL-2,6-DI-tert-BUTYLPHENOL □ NCI-C03598 □ NONOX TBC □ PARABAR 441 □ SUSTANE □ TENOX BHT □ TOPANOL □ VANLUBE PCX

TOXICITY DATA with REFERENCE:

skn-hmn 500 mg/48H MLD AMIHBC 5,311,52
 skn-rbt 500 mg/48H MOD AMIHBC 5,311,52
 eye-rbt 100 mg/24H MOD 28ZPAK -,57,72
 dni-hmn:lym 20 µmol/L BBRC9 80,963,78
 dns-rat:lvrl 100 pmol/L CRNGDP 5,1547,84
 spm-mus-ivr 350 mg/kg/5D-I CMMUAO 5,257,78
 orl-rat TD:247 g/kg/3Y-C:CAR,REP FCTOD7 24,1,86
 orl-rat TD:247 g/kg/3Y-C:NEO,REP FCTOD7 24,1,86
 orl-wmn TDLo:80 mg/kg:PSY,GIT NEJMAG 314,648,86
 orl-rat LD50:890 mg/kg NEOLA4 24,253,77

orl-mus LD50:650 mg/kg SCIEAS 36(1-4),10,89
 ipr-mus LD50:138 mg/kg TXAPA9 61,475,81
 ivn-mus LD50:180 mg/kg JMCMA 23,1350,80
 orl-cat LDLo:940 mg/kg AMIHAB 11,93,55
 orl-rbt LDLo:2100 mg/kg AMIHAB 11,93,55
 orl-gpg LD50:10,700 mg/kg AMIHAB 11,93,55

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 40,161,86. NCI Carcinogenesis Bioassay Completed; (feed): No Evidence: mouse, rat NCITR* NCI-CG-TR-150,79. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

OSHA PEL: TLV 10 mg/m³

ACGIH TLV: TLV 10 mg/m³; Not Classifiable as a Human Carcinogen

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion. An experimental teratogen. Other experimental reproductive effects. A human skin irritant. A skin and eye irritant. Questionable carcinogen with experimental carcinogenic and neoplastigenic data. Combustible when exposed to heat or flame. It can react with oxidizing materials. To fight fire, use CO₂, dry chemical. When heated to decomposition it emits acrid smoke and fumes.

BFX000 CAS: 613-35-4 HR: 3

4',4'''-BIACETANILIDE

mf: C₁₆H₁₆N₂O₂ mw: 268.34

PROP: Solid. Mp: 317°.

SYNS: N,N'-(1,1'-BIPHENYL)-4,4'-DIYLBIS-ACETAMIDE 4',4'''-BIACETANILIDE □ N,N'-4,4'-BIPHENYLYLENEBISACETAMIDE □ 4,4'-DIACETYLAMINOBIPHENYL □ N,N'-DIACETYL BENZIDINE □ 4,4'-DIACETYLBENZIDINE

TOXICITY DATA with REFERENCE:

mma-sat 5 µg/plate ENMUDM 6,145,84
 dnd-rat:lvrl 100 mg/L CRNGDP 5,407,84

CONSENSUS REPORTS: IARC Cancer Review: Group 2B IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 16,293,78. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BFX125 CAS: 3624-96-2 HR: 3

BIALLYLAMICOL DIHYDROCHLORIDE

mf: C₂₈H₄₀N₂O₂•2ClH mw: 509.62

PROP: Solid. Mp: 209–210°.

SYNS: BIALAMICOL HYDROCHLORIDE □ BIALLYLAMICOL HYDROCHLORIDE □ α,α'-BIS(DIETHYLAMINO)-5,5'-DIALLYL-m,m'-BITOLYL-4,4'-DIOL DIHYDROCHLORIDE □ CAMOFORM HYDROCHLORIDE □ PAA-701 DIHYDROCHLORIDE □ SN 6771 DIHYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-hmn TDLo:243 mg/kg/9D:MET,GIT 85GLAQ 1,304,46
 orl-hmn TDLo:43 mg/kg:GIT 85GLAQ 1,304,46
 orl-rat LD50:1649 mg/kg ANTCAO 7,113,57
 orl-mus LD50:3950 mg/kg ANTCAO 7,113,57

SAFETY PROFILE: Poison to humans by ingestion with systemic effects: fever and nausea or vomiting. When

heated to decomposition it emits toxic fumes of NO_x and HCl. See also ALLYL COMPOUNDS.

BFX250 CAS: 2130-56-5 HR: 2
5,5'-BIANTHRANILIC ACID

mf: C₁₄H₁₂N₂O₄ mw: 272.28

PROP: Needles. Mp: 300°.

SYNS: 3,3'-BENZIDINEDICARBOXYLIC ACID □ 4,4'-DIAMINO BIPHENYL-3,3'-DICARBOXYLIC ACID □ 4,4'-DIAMINO-3,3'-BIPHENYLDICARBOXYLIC ACID □ 3,3'-DICARBOXY-BENZIDINE □ KWAŚ BENZYDYNODWUKAROKSYLOWY (POLISH)

TOXICITY DATA with REFERENCE:

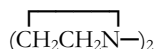
pic-esc 100 mmol/L MDMAZ 31,11,79

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BFX325 CAS: 4388-03-8 HR: 3
1,1'-BIAZIRIDINYL

mf: C₄H₈N₂ mw: 84.12



PROP: Liquid. Fp: -11, bp: 83–83.2° @ 750 mm. Sol in H₂O and EtOH.

SAFETY PROFILE: When heated it reacts violently with oxygen. When heated to decomposition it emits toxic fumes of NO_x.

BFX500 CAS: 103-29-7 HR: 3
BIBENZYL

mf: C₁₄H₁₄ mw: 182.28

PROP: Flash p: 264°F, autoign temp: 896°F, d: 1.0, vap d: 6.29, bp: 284°, mp: 52°.

SYNS: DIBENZYL □ 1,2-DIPHENYLETHANE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:2500 mg/kg ARZNAD 19,617,69

ivn-mus LD50:78 mg/kg ARZNAD 19,617,69

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by intraperitoneal route. Combustible. To fight fire, use water, spray, mist, alcohol foam, dry chemical. When heated to decomposition it emits acrid smoke and fumes.

BFX520 CAS: 528-43-8 HR: 2
2,2'-BICHAVICOL

mf: C₁₈H₁₈O₂ mw: 266.36

SYNS: (1,1'-BIPHENYL)-2,2'-DIOL, 5,5'-DI-2-PROPENYL- □ 5,5'-DIALLYL-2,2'-BIPHENYLDIOL □ 2,2'-BIPHENYLDIOL, 5,5'-DIALLYL- □ MAGNOLOL

TOXICITY DATA with REFERENCE:

orl-mus LD50:2200 mg/kg BRXXAA #5135746

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BFX530 CAS: 485-49-4 HR: 3
BICUCULLINE

mf: C₂₀H₁₇NO₆ mw: 367.38

TOXICITY DATA with REFERENCE:

ipr-mus LD50:8480 µg/kg CUTOEX 1,199,93

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x.

BFX545 CAS: 6708-14-1 HR: 2
BICYCLOBUTYLIDINE

mf: C₈H₁₂ mw: 108.20

SYNS: Δ-1,1'-BICYCLOBUTYL □ CYCLOBUTANE, CYCLO-BUTYLIDINE- □ CYCLOBUTYLIDINECYCLOBUTANE □ DICYCLOBUTYLIDENE

TOXICITY DATA with REFERENCE:

orl-mus LD50:2610 mg/kg GTPZAB 28(5),55,1984

ihl-unr LC : >3693 mg/m³ GTPZAB 28(5),55,1984

SAFETY PROFILE: Moderately toxic by ingestion and inhalation routes. When heated to decomposition it emits acrid smoke and irritating vapors.

BFX650 CAS: 22590-50-7 HR: 3
BICYCLO(2.2.1)HEPTAN-2,5-DIOL, DIALLYL ETHER

mf: C₁₃H₂₀O₂ mw: 208.33

SYN: BICYCLO(2.2.1)HEPT-2,5-YLENE, BISALLYL ETHER

TOXICITY DATA with REFERENCE:

orl-rat LD50:3730 µL/kg AIHAAP 30,470,69

skn-rbt LD50:5950 µL/kg AIHAAP 30,470,69

SAFETY PROFILE: A poison by ingestion and skin contact. When heated to decomposition it emits acrid smoke and irritating vapors.

BFY000 CAS: 826-62-0 HR: 1
BICYCLO(2.2.1)-HEPT-5-ENE-2,3-DICARBOXYLIC ANHYDRIDE

mf: C₉H₈O₃ mw: 164.17

SYN: ANHYDRID KYSELINY 3,6-ENDOMETHYLEN-Δ₄-TETRA HYDROFTALOVE (CZECH)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,140,72

eye-rbt 5 mg/24H SEV 28ZPAK -,140,72

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mild skin and severe eye irritant. When heated to decomposition it emits acrid smoke and irritating fumes. See also ANHYDRIDES.

BFY100 CAS: 2550-75-6 HR: 3
BICYCLO(2.2.1)HEPT-2-ENE, 1,2,3,4,7,7-HEXA CHLORO-5,6-BIS(CHLOROMETHYL)- (9CI)

mf: C₉H₆Cl₈ mw: 397.75

SYNS: AC 12402 □ ALODAN □ ALODAN (PESTICIDE) □ 2,3-BIS(CHLOROMETHYL)-1,4,5,6,7,7-HEXACHLOROBICYCLO (2.2.1)HEPT-4-ENE □ CHLORBICYCLEN □ CYCLODAN □ HERCULES 426 □ HERCULES 12402 □ 2-NORBORNENE, 1,2,3,4,7,7-HEXACHLORO-5,6-BIS(CHLOROMETHYL)-

TOXICITY DATA with REFERENCE:

orl-rat LD50:200 mg/kg JEENAI 61,743,68

ihl-rat LC50:100 mg/m³/4H 85JCAE -,174,86

skn-rat LD50:1 g/kg GTPZAB 8(4),30,64

orl-mus LD50:750 mg/kg GTPZAB 8(4),30,64

skn-mus LDLo:1 g/kg GISAAA 25(11),29,60

SAFETY PROFILE: A poison by ingestion.

Moderately toxic by skin contact. When heated to decomposition it emits toxic vapors of Cl^- .

BFY250 CAS: 95-39-6 HR: 2
BICYCLO(2.2.1)HEPT-5-ENE-2-METHYL
ACRYLATE

mf: $\text{C}_{11}\text{H}_{14}\text{O}_2$ mw: 178.25

SYNS: ACRYLIC ACID-5-NORBORNEN-2-METHYL ESTER □

ACRYLIC ACID-5-NORBORNEN-2-YLMETHYL ESTER □

CYCLOL ACRYLATE □ 2,5-endo-METHYLENE- Δ^3 -TETRA-

HYDROBENZYL ACRYLATE □ 5-NORBORNENE-2-

METHANOL ACRYLATE □ 5-NORBORNENE-2-METHYL-

OLACRYLATE □ 2-PROPENOIC ACID BICYCLO(2,2,1)HEPT-5-
 EN-2-YLMETHYL ESTER

TOXICITY DATA with REFERENCE:

orl-rat LD50:1410 mg/kg TXAPA9 28,313,74

skn-rbt LD50:2830 mg/kg TXAPA9 28,313,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. See also ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BFY400 CAS: 97945-32-9 HR: D
2-(BICYCLO(2.2.1)HEPT-2-YLIDENEMETHYL)-1-
METHYL-5-NITRO-1H-IMIDAZOLE

mf: $\text{C}_{12}\text{H}_{16}\text{N}_3\text{O}_2$ mw: 234.31

SYN: 1H-IMIDAZOLE, 2-(BICYCLO(2.2.1)HEPT-2-YLIDENE
 METHYL)-1-METHYL-5-NITRO-

TOXICITY DATA with REFERENCE:

mic-bac-sat 1300 pmol/plate EMMUEG 19,167,91

uns-bac-esc 12,900 pmol/tube EMMUEG 19,167,91

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x .

BFY750 CAS: 2886-89-7 HR: 2
BICYCLONONADIENE DIEPOXIDE

mf: $\text{C}_9\text{H}_{12}\text{O}_2$ mw: 152.21

SYNS: 1,2,5,6-DIEPOXYHEXAHYDROINDAN □ 4,9-

DIOXATETRACYCLO(5.4.0.0^{3,5}.0^{8,10})UNDECANE □ 4,10-

DIOXATETRACYCLO(5.4.0^{3,5}.0^{1,7}.0^{9,11})UNDECANE □

OCTAHYDRO-2H-BISOXIRENO(a,f)INDENE

TOXICITY DATA with REFERENCE:

orl-rat LD50:2140 mg/kg AIHAAP 30,470,69

skn-rbt LDLo:1770 mg/kg AIHAAP 30,470,69

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. When heated to decomposition it emits acrid smoke and irritating fumes.

BFZ000 HR: 3
3,3'-(BICYCLO(2.2.2)OCTANE-1,4-DIYLBIS
(CARBONYLIMINO-4,1-PHENYLENE-
CARBONYL IMINO))BIS(1-ETHYLPYRIDIN-
IUM) SALT with 4-METHYLBENZENE-
SULFONIC ACID (1:2)

mf: $\text{C}_{38}\text{H}_{42}\text{N}_6\text{O}_4 \cdot 2\text{C}_7\text{H}_7\text{O}_3\text{S}$ mw: 989.26

TOXICITY DATA with REFERENCE:

dnd-mus:lym 6800 nmol/L JMCMA 22,134,79

ipr-mus LD10:27 mg/kg JMCMA 22,134,79

SAFETY PROFILE: Poison by intraperitoneal route. See also SULFONATES. Mutation data reported. When heated to decomposition it emits very toxic fumes of SO_x and NO_x .

BFZ100 CAS: 6809-95-6 HR: 3
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
BENZYL KETONE

mf: $\text{C}_{16}\text{H}_{14}\text{O}$ mw: 222.30

SYNS: BENZYL BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL

KETONE □ KETONE, BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
 BENZYL

TOXICITY DATA with REFERENCE:

ipr-mus LD50:1750 mg/kg JMCMA 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.

BFZ110 CAS: 6813-90-7 HR: 3
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
BENZYL KETONE OXIME

mf: $\text{C}_{16}\text{H}_{15}\text{NO}$ mw: 237.32

SYNS: BENZYL BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL

KETONE OXIME □ KETONE, BICYCLO(4.2.0)OCTA-1,3,5-
 TRIEN-7-YL BENZYL, OXIME

TOXICITY DATA with REFERENCE:

ipr-mus LD50:550 mg/kg JMCMA 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x .

BFZ120 CAS: 1075-30-5 HR: 3
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
METHYL KETONE

mf: $\text{C}_{10}\text{H}_{10}\text{O}$ mw: 146.20

SYNS: BICYCLO(4.2.0)OCTA-1,3,5-TRIENE, 7-ACETYL- □
 KETONE, BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL METHYL

TOXICITY DATA with REFERENCE:

ipr-mus LD50:550 mg/kg JMCMA 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.

BFZ130 CAS: 6813-93-0 HR: 3
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
METHYL KETONE O-ACETYLOXIME

mf: $\text{C}_{12}\text{H}_{13}\text{NO}_2$ mw: 203.26

SYNS: O-ACETYL-1-ACETYLBENZOCYCLOBUTENE OXIME

□ KETONE, BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL METHYL,
 O-ACETYLOXIME

TOXICITY DATA with REFERENCE:

ipr-mus LD50:550 mg/kg JMCMA 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x .

BFZ140 CAS: 6813-95-2 HR: 3

**BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
METHYL KETONE O-ALLYLOXIME**mf: C₁₃H₁₅NO mw: 201.29**SYN:** KETONE, BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
METHYL, O-ALLYLOXIME**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:1320 mg/kg JMC MAR 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x.**BFZ150 CAS: 7315-27-7 HR: 3
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
METHYL KETONE O-BUTYLOXIME**mf: C₁₄H₁₉NO mw: 217.34**SYN:** KETONE, BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
METHYL, O-BUTYLOXIME**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:1750 mg/kg JMC MAR 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x.**BFZ160 CAS: 3264-31-1 HR: 3
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
METHYL KETONE OXIME**mf: C₁₀H₁₁NO mw: 161.22**SYNS:** 1-ACETYLBENZOCYCLOBUTENE OXIME □ KETONE,
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL METHYL, OXIME**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:550 mg/kg JMC MAR 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x.**BFZ170 CAS: 73747-51-0 HR: 3
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
PENTYL KETONE OXIME**mf: C₁₃H₁₇NO mw: 203.31**SYNS:** 1-BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL-1-PENTAN-
ONE OXIME □ KETONE, BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-
YL PENTYL, OXIME □ PENTANONE, 1-BENZOCYCLOBUTYL-,
OXIME □ 1-PENTANONE, 1-BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-
7-YL-, OXIME**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:550 mg/kg JMC MAR 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x.**BFZ180 CAS: 6809-94-5 HR: 3
BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL
PHENYL KETONE**mf: C₁₅H₁₂O mw: 208.27**SYNS:** BICYCLO(4.2.0)OCTA-1,3,5-TRIENE, 7-BENZOYL- □
KETONE, BICYCLO(4.2.0)OCTA-1,3,5-TRIEN-7-YL PHENYL**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:1250 mg/kg JMC MAR 9,656,66

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.**BGA250 CAS: 81-21-0 HR: 3
BICYCLOPENTADIENE DIOXIDE**mf: C₁₀H₁₂O₂ mw: 164.22**SYNS:** DICYCLOPENTADIENE DIEPOXIDE □ DICYCLO
PENTADIENE DIOXIDE □ 1,2,5,6-DIEPOXYHEXAHYDRO-4,7-
METHANOINDAN □ 1,2,5,6-DIEPOXY-3a,4,5,6,7,7a-
HEXAHYDRO-4,7-METHANOINDAN □ UNOX 207 □ UNOX
EPOXIDE 207 □ UNOX 207X**TOXICITY DATA with REFERENCE:**

skn-rbt 500 mg open MLD UCDS** 10/5/61

orl-rat LD50:210 mg/kg UCDS** 10/5/61

ivn-mus LD50:56 mg/kg CSLNX* NX#04159

skn-rbt LD50:8000 mg/kg UCDS** 10/5/61

CONSENSUS REPORTS: Reported in EPA TSCA
Inventory.**SAFETY PROFILE:** Poison by ingestion and intravenous routes. Mildly toxic by skin contact. A skin irritant. When heated to decomposition it emits acrid smoke and irritating fumes.**BGA500 HR: 2
BICYCLOPENTADIENYLBIS(TRICARBONYL
IRON)**mf: C₁₆Fe₂H₈O₆ mw: 407.94**TOXICITY DATA with REFERENCE:**

orl-rat LD50:2900 mg/kg SCCUR* -,1,61

ipr-rat LD50:1000 mg/kg SCCUR* -,1,61

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits acrid smoke and irritating fumes. See also IRON COMPOUNDS and CARBONYLS.**BGA650 CAS: 5164-35-2 HR: 3
BICYCLO(2.1.0)PENT-2-ENE**mf: C₅H₆ mw: 66.10**PROP:** Unstable liquid.**SAFETY PROFILE:** This strained ring compound may explode spontaneously. When heated to decomposition it emits acrid smoke and fumes.**BGA750 CAS: 1464-53-5 HR: 3
1,1'-BI(ETHYLENE OXIDE)**mf: C₄H₆O₂ mw: 86.10**PROP:** Colorless liquid. Bp: 142°, mp: 19°, d: 1.113 @
18°/4°.**SYNS:** BIOXIRANE □ 2,2'-BIOXIRANE □ BUTADIENDIOXYD
(GERMAN) □ BUTADIENE DIEPOXIDE □ 1,3-BUTADIENE
DIEPOXIDE □ BUTADIENE DIOXIDE □ BUTANE DIEPOXIDE
□ DEB □ DIEPOXYBUTANE □ 2,4-DIEPOXYBUTANE □ 1,2,3,4-
DIEPOXYBUTANE □ DIOXYBUTADIENE □ ENT 26,592 □
ERYTHRITOL ANHYDRIDE □ RCRA WASTE NUMBER U085**TOXICITY DATA with REFERENCE:**

skn-rbt 10 mg/24H open SEV AMIHBC 10,61,54

skn-rbt 50 mg open SEV UCDS** 4/25/58

eye-rbt 250 µg open SEV AMIHBC 10,61,54

eye-rbt 3 ppm/3D JPCAAC 10,17,60

mno-asn 20 µmol/L MUREAV 132,161,84
 cyt-hmn:bmr 100 µg/L CGCYDF 9,51,83
 sce-mus-ivn 193 µmol/kg MUREAV 108,251,83
 sce-ham:lng 1 mg/L CNREA8 44,3270,84
 orl-rat LD50:78 mg/kg AMIHBC 10,61,54
 ihl-rat LC50:90 ppm/4H SCCUR* -,2,61
 orl-mus LD50:72 mg/kg SCCUR* -,2,61
 ipr-mus LD50:31 mg/kg AEPPAE 230,559,57
 skn-rbt LD50:80 mg/kg AMIHBC 10,61,54

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. EPA Extremely Hazardous Substances List. EPA Genetic Toxicology Program. Community Right-To-Know List. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Confirmed carcinogen with experimental tumorigenic data. Poison by ingestion, inhalation, skin contact, and intraperitoneal routes. Human mutation data reported. A severe skin and eye irritant. When heated to decomposition it emits acrid smoke and irritating fumes.

BGA825 BIFONAZOLE

HR: 3

mf: C₂₂H₁₈N₂ mw: 310.42

SYNS: BAY H 4502 □ BIFONAZOL □ 1-(α-(4-BIPHENYL) BENZYL)IMIDAZOLE □ 1-((4-BIPHENYL)PHENYLMETHYL)-1H-IMIDAZOLE □ MYCOSPOR

TOXICITY DATA with REFERENCE:

orl-rat LD50:1463 mg/kg OYYAA2 28,23,84
 ivn-rat LD50:63 mg/kg OYYAA2 28,23,84
 orl-mus LD50:2629 mg/kg
 ivn-mus LD50:57 mg/kg OYYAA2 28,23,84
 orl-rbt LD50:4000 mg/kg ARZNAD 33,739,83

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.

BGB250 CAS: 37247-90-8 HR: 3 BIHOROMYCIN (crystalline)

mf: C₄₁H₇₆O₁₃ mw: 777.17

PROP: Crystals from hexane. Mp: 130°.

TOXICITY DATA with REFERENCE:

orl-mus LD50:7 mg/kg 85ERAY 2,1077,78
 ipr-mus LD50:19 mg/kg 85ERAY 2,1077,78

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits acrid smoke and irritating fumes.

BGB275 CAS: 482-89-3 HR: D ((Δ^{2,2'})-BIINDOLINE)-3,3'-DIONE

mf: C₁₆H₁₀N₂O₂ mw: 262.28

SYNS: (Δ^{2,2'})-BIPSEUDOINDOXYL □ 11669 BLUE □ BLUE NO. 201 □ C.I. 73000 □ C.I. VAT BLUE 1 □ CYSTOCEVA □ D&C BLUE NO. 6 □ D and C BLUE NO. 6 □ DIINDOGEN □ (2,2'-BIINDOLINE)-3,3'-DIONE □ INDIGO □ INDIGO BLUE □ INDIGO CIBA □ INDIGO CIBA SL □ INDIGO J □ INDIGO N □ INDIGO NAC □ INDIGO NACCO □ INDIGO P □ INDIGO PLN □ INDIGO POWDER W □ INDIGO PURE BASF □ INDIGO PURE BASF POWDER K □ INDIGO SYNTHETIC □ INDIGOTIN □ INDIGO VS □ 3H-INDOL-3-ONE, 2(1,3-DIHYDRO-3-OXO-2H-INDOL-2-YLIDENE)-1,2-DIHYDRO-(9CI) □ LITHOSOL DEEP

BLUE V □ MITSUI INDIGO PASTE □ MITSUI INDIGO PURE □ MODR KYPOVA 1 □ MONOLITE FAST NAVY BLUE BV □ NCI-C61392 □ SYNTHETIC INDIGO □ SYNTHETIC INDIGO TS □ VAT BLUE 1 □ VULCAFIX BLUE R □ VULCAFOR BLUE A □ VULCANOSINE DARK BLUE L □ VYNAMON BLUE A

TOXICITY DATA with REFERENCE:

mma-sat 500 nmol/plate CRNGDP 3,1321,82

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.

BGB315 CAS: 3521-84-4 HR: 2 BILIGRAFIN FORTE

mf: C₂₀H₁₄I₆N₂O₆•2C₇H₁₇NO₅ mw: 1530.26

SYNS: ADIPIODONE MEGLUMINE □ CAVUMBREN □ CHOLOGRAF-N-METHYLGLUCAMINE □ ENDOCISTOBIL □ ENDOGRAFIN □ ENDOGRAPHIN □ INTRABLIX □ IODIPAMIDE MEGLUMINE □ IODIPAMIDE MEGLUMINE SALT □ IODIPAMIDE METHYLGLUCAMINE SALT □ MEGLUMINE IODIPAMIDE □ METHYL GLUCAMINE BILIGRAFIN □ METHYL GLUCAMINE IODIPAMIDE □ ULTRABIL

TOXICITY DATA with REFERENCE:

ivn-rat LD50:5000 mg/kg NIIRDN 6,5,82
 par-rat LD50:1921 mg/kg FRPSAX 28,1011,73
 ivn-mus LD50:3195 mg/kg INVRAV 15(Suppl),142,80
 ivn-dog LD50:1200 mg/kg FRPSAX 28,996,73
 par-rbt LD50:1446 mg/kg FRPSAX 28,1011,73

SAFETY PROFILE: Moderately toxic by several routes. When heated to decomposition it emits toxic fumes of I⁻ and NO_x.

BGB325 HR: 2 BILIGRAFIN SODIUM

mf: C₂₀H₁₂I₆N₂O₆•2Na mw: 1183.72

SYNS: ADIPIC ACID DI-(3-CARBOXY-2,4,6-TRIIODOANILIDE) DISODIUM □ ADIPINSAEURE-DI-(3-CARBOXY-2,4,6-TRIJOD-ANILID) DINATRIUM (GERMAN) □ BILIGRAFIN NATRIUM (GERMAN)

TOXICITY DATA with REFERENCE:

ivn-rat LD50:3800 mg/kg ARZNAD 14,451,64
 ivn-mus LD50:3200 mg/kg ARZNAD 14,451,64
 ivn-dog LD50:1900 mg/kg ARZNAD 14,451,64

SAFETY PROFILE: Moderately toxic by intravenous route. When heated to decomposition it emits toxic fumes of I⁻, NO_x, and Na₂O.

BGB350 HR: 1 BILIVISTAN SODIUM

mf: C₁₈H₈I₆N₂O₇•2Na mw: 1171.66

SYNS: BILIVISTAN NATRIUM (GERMAN) □ DIGLYCOLIC ACID DI-(3-CARBOXY-2,4,6-TRIIODOANILIDE) DISODIUM □ DIGLYCOLSAEURE-DI-(3-CARBOXY-2,4,6-TRIJOD-ANILID) DINATRIUM (GERMAN) □ 3,3'-(OXYDIMETHYLENEBIS-(CARBONYLIMINO))BIS(2,4,6-TRIIODOBENZOIC ACID DISODIUM SALT)

TOXICITY DATA with REFERENCE:

ivn-rat LD50:6000 mg/kg ARZNAD 14,451,64
 ivn-mus LD50:5300 mg/kg ARZNAD 14,451,64
 ivn-dog LD50:5500 mg/kg ARZNAD 14,451,64

SAFETY PROFILE: Mildly toxic by intravenous route. When heated to decomposition it emits toxic fumes of I^- , NO_x , and Na_2O .

BGB400 CAS: 55268-74-1 HR: 3 BILTRICIDE

mf: $\text{C}_{19}\text{H}_{24}\text{N}_2\text{O}_2$ mw: 312.45

PROP: Crystals from EtOAc/hexane. Mp: 136–138°. Solubility (g/100 mL): ethanol 9.7; chloroform 56.7; water 0.04.

SYNS: CESOL □ 2-CYCLOHEXYLCARBONYL-1,2,3,6,7,11b-HEXAHYDRO-4H-PYRAZINO(2,1-a)ISOQUINOLIN-4-ONE □ DRONCIT □ EMBAY 8440 □ PRAZIQUANTEL □ PYQUITON

TOXICITY DATA with REFERENCE:

mno-sat 150 mg/L ENMUDM 2,234,80
dni-hmn:hla 5 mmol/L MUREAV 93,447,82
bfa-mus/sat 1200 mg/kg CNREA8 38,447,78
msc-ham:lng 10 mg/L CNREA8 42,269,82
orl-rat LD50:2840 mg/kg ARZNAD 31,555,81
ipr-rat LD50:586 mg/kg IYKEDH 20,228,89
orl-mus LD50:2454 mg/kg ARZNAD 31,555,81
ipr-mus LD50:376 mg/kg IYKEDH 20,228,89
scu-mus LD50:7172 mg/kg ARZNAD 31,555,81
orl-rbt LD50:1050 mg/kg ARZNAD 31,555,81

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion and other routes. Human mutation data reported. When heated to decomposition it emits toxic fumes of NO_x .

BGB500 CAS: 485-31-4 HR: 3 BINAPACRYL

mf: $\text{C}_{15}\text{H}_{18}\text{N}_2\text{O}_6$ mw: 322.35

PROP: Crystals or powder. Mp: 65–69°. Very sltly sol in H_2O ; sol in most org solvs.

SYNS: ACRICID □ AMBOX □ 2-sec-BUTYL-4,6-DINITRO PHENYL-3,3-DIMETHYLACRYLATE □ 2-sec-BUTYL-4,6-DINITRO PHENYL-3-METHYL-2-BUTENOATE □ 2-sec-BUTYL-4,6-DINITRO PHENYL-3-METHYLCROTONATE □ 2-sec-BUTYL-4,5-DINITRO PHENYL SENECIOATE □ DAPACRYL □ 3,3-DIMETHYL-ACRYLATE de 2,4-DINITRO-6-(1-METHYLPROPYLE) PHENYLE (FRENCH) □ 3,3-DIMETHYLACRYLIC ACID 2-sec-BUTYL-4,5-DINITROPHENYL ESTER □ DINAPACRYL □ 4,6-DINITRO-2-sec-BUTYLPHENYL β,β -DIMETHYLACRYLATE □ 2,4-DINITRO-6-sec-BUTYLPHENYL-2-METHYLCROTONATE □ 4,6-DINITRO PHENYL-2-sec-BUTYL-3-METHYL-2-BUTENONATE □ DINOSEB METHACRYLATE □ ENDOSAN □ ENT 25,793 □ FMC 9044 □ HOE 2784 □ 3-METHYLCROTONIC ACID 2-sec-BUTYL-4,6-DINITROPHENYL ESTER □ (6-(1-METHYL-PROPYL)-2,4-DINITRO-FENYL)-3,3-DIMETHYL ACRYLAAT (DUTCH) □ (6-(1-METHYL-PROPYL)-2,4-DINITRO-PHENYL)-3,3-DIMETHYL ACRYLAT (GERMAN) □ 2-(1-METHYLPROPYL)-4,6-DINITRO PHENYL- β,β -DIMETH-ACRYLATE □ (6-(1-METIL-PROPYL)-2,4-DINITRO-FENIL)-3,3-DIMETIL-ACRILATO (ITALIAN) □ MOROCIDE □ MORROCID □ NIA 9044 □ NIAGARA 9044

TOXICITY DATA with REFERENCE:

mno-sat 5 mg/plate MUREAV 116,185,83
orl-rat LD50:58 mg/kg TXAPA9 14,515,69
skn-rat LD50:720 mg/kg WRPCA2 9,119,70
orl-mus LD50:1600 mg/kg TXAPA9 7,353,65
skn-mus LD50:750 mg/kg PEMNDP 8,73,87

orl-dog LD50:50 mg/kg GUCHAZ 6,42,73
skn-rbt LD50:750 mg/kg GUCHAZ 6,42,73
orl-gpg LD50:200 mg/kg TXAPA9 7,353,65

SAFETY PROFILE: Poison by ingestion. Moderately toxic by skin contact. Mutation data reported. A cholinesterase inhibitor. When heated to decomposition it emits fumes of NO_x . See also PARATHION and PHOSPHORUS COMPOUNDS.

BGB750 CAS: 4488-22-6 HR: 2 (1,1'-BINAPHTHALENE)-2,2'-DIAMINE

mf: $\text{C}_{20}\text{H}_{16}\text{N}_2$ mw: 284.38

PROP: Silvery plates from EtOH. Mp: 191°.

SYN: 2,2'-DIAMINO-1,1'-DINAPHTHYL

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x .

BGC000 CAS: 795-95-9 HR: 2 (1,2'-BINAPHTHALENE)-1,2'-DIAMINE

mf: $\text{C}_{20}\text{H}_{16}\text{N}_2$ mw: 284.38

SYN: 1:2'-DIAMINO-1':2-DINAPHTHYL

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data by skin contact. When heated to decomposition it emits toxic fumes of NO_x .

BGC100 CAS: 602-09-5 HR: 3 (1,1'-BINAPHTHALENE)-2,2'-DIOL

mf: $\text{C}_{20}\text{H}_{14}\text{O}_2$ mw: 286.34

SYNS: β -BINAPHTHOL □ 1,1'-BI-2-NAPHTHOL □ BIS- β -NAPHTHOL □ 2,2'-DIHYDROXYBINAPHTHALENE □ 2,2'-DIHYDROXYDINAPHTHYL □ 2,2'-DINAPHTHOL

TOXICITY DATA with REFERENCE:

orl-mus LDLo:42 mg/kg AECTCV 14,111,85

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion. When heated to decomposition it emits acid smoke and irritating vapors.

BGC125 CAS: 138635-74-2 HR: 2 BINDAR OS-0704

SYNS: D 705 □ OS-0704

TOXICITY DATA with REFERENCE:

eye-rbt 20 mg/4H SEV GISAAA 56(4),83,1991

orl-rat LD50:3840 mg/kg GISAAA 56(4),83,1991

SAFETY PROFILE: Moderately toxic by ingestion. A severe eye irritant. When heated to decomposition it emits acid smoke and irritating vapors.

BGC250 CAS: 69382-20-3 HR: 3 BINDON ETHYL ETHER

mf: $\text{C}_{20}\text{H}_{14}\text{O}_3$ mw: 302.34

SYNS: BINDON ATHYLATHER □ 2-(3-ETHOXY-1-INDANYLIDENE)-1,3-DINDANDIONE

TOXICITY DATA with REFERENCE:

ipr-mus LDLo:40 mg/kg ARTODN 33,191,75

SAFETY PROFILE: Poison by intraperitoneal route. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits acid smoke and irritating fumes. See also ETHERS.

BGC500 CAS: 57647-35-5 HR: 3**BINODALINE HYDROCHLORIDE**mf: C₁₉H₂₃N₃•ClH mw: 329.87**PROP:** Solid. Mp: 188–190°.

SYNS: BINODALIN HYDROCHLORID (GERMAN) □ 1-(DIMETHYLAMINOETHYLMETHYL)AMINO-3-PHENYLINDOLE HYDROCHLORIDE □ 1-(6-DIMETHYLAMINOETHYLMETHYL)AMINO-3-PHENYLINDOLE HYDROCHLORIDE □ SGD-SCHA 1059 □ N,N,N'-TRIMETHYL-N'-(3-PHENYL-1H-INDOL-1-YL)-1,2-ETHANEDIAMINE MONOHYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-rat LD50:1160 mg/kg ARZNAD 33,726,83

ivn-rat LD50:26 mg/kg ARZNAD 22,726,83

orl-mus LD50:760 mg/kg ARZNAD 33,726,83

ivn-mus LD50:54 mg/kg ARZNAD 33,726,83

ivn-cat LDLo:50,800 µg/kg ARZNAD 33,726,83

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of HCl and NO_x.

BGC625 CAS: 6620-60-6 HR: 2**BINOSIDE**mf: C₁₈H₂₆N₂O₄ mw: 334.46**PROP:** Crystals. Mp: 142–145°.

SYNS: dl-4-BENZAMIDO-N,N-DIPROPYLGLUTARAMIC ACID □ (±)-4-(BENZOYLAMINO)-5-(DIPROPYLAMINO)-5-OXOPENTANOIC ACID □ CR 242 □ 242 DL □ GASTRIDENE □ GASTROTROPIC □ MIDELID □ MILID □ MILIDE □ NULSA □ PROGLUMIDE □ PROMIDE (parasympatholytic) □ ULCUTIN □ W 5219 □ XYDE □ XYLAMIDE □ XYLAMIDE (gastroprotective agent)

TOXICITY DATA with REFERENCE:

orl-rat LD50:20 g/kg NIIRDN 6,722,82

ipr-rat LD50:1420 mg/kg NIIRDN 6,722,82

orl-mus LD50:8070 mg/kg MIMEAO 58,3653,67

ipr-mus LD50:1480 mg/kg NIIRDN 6,722,82

ivn-mus LD50:2250 mg/kg MIMEAO 58,3653,67

SAFETY PROFILE: Moderately toxic by several routes. An experimental teratogen. When heated to decomposition it emits toxic fumes of NO_x.

BGC750 CAS: 302-45-5 HR: 3**BIOALLETHRIN**mf: C₁₉H₂₆O₃ mw: 302.45

SYNS: d-trans ALLETHRIN □ ALLYL HONOLOG of CINERIN I □ BIOALETRINA (PORTUGUESE) □ (+)-trans-CHRYSANthemUMIC ACID ESTER of (+)-ALLETHROLONE □ ENT 16,275

TOXICITY DATA with REFERENCE:

orl-rat LD50:425 mg/kg SPEADM 78-1,7,78

ivn-rat LDLo:4 mg/kg BIOGAL 41(10),283,75

orl-mus LD50:330 mg/kg EVHPAZ 14,15,76

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion and intravenous routes. When heated to decomposition it emits acrid and irritating fumes. An insecticide. See other allethrin entries and ALLYL COMPOUNDS.

BGC825 CAS: 1000-10-0 HR: 2**BODIADASTASE 1000****PROP:** Extracted from *Aspergillus* (KSRNAM 8,2378,74).**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:678 mg/kg KSRNAM 8,2378,74

scu-rat LD50:7320 mg/kg KSRNAM 8,2378,74
ipr-mus LD50:445 mg/kg KSRNAM 8,2378,74
scu-mus LD50:2220 mg/kg KSRNAM 8,2378,74

SAFETY PROFILE: Moderately toxic by intraperitoneal and subcutaneous routes. Experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating fumes.

BGD000 CAS: 5697-56-3 HR: 3**BIOGASTRONE**mf: C₃₄H₅₀O₇ mw: 570.84**PROP:** Cream crystals. Mp: 291–294°.

SYNS: BIORAL □ CARBENOXOLONE □ 3-β-(3-CARBOXYPROPIONYLOXY)-11-OXO-OLEAN-12-EN-30-OIC ACID □ 3-β-HYDROXY-11-OXO-OLEAN-12-EN-30-OIC ACID, HYDROGEN SUCCINATE

TOXICITY DATA with REFERENCE:

orl-man TDLo:120 mg/kg/56D-I BMJOAE 2,150,76

orl-rat LD50:2450 mg/kg OYYAA2 19,323,80

ipr-rat LD50:128 mg/kg OYYAA2 19,323,80

scu-rat LD50:1720 mg/kg OYYAA2 19,323,80

scu-dog LD50:1060 mg/kg OYYAA2 19,323,80

ivn-dog LD50:371 mg/kg OYYAA2 19,323,80

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. Moderately toxic by ingestion and subcutaneous routes. Human systemic effects by ingestion: muscle weakness and flaccid paralysis. When heated to decomposition it emits acrid smoke and fumes.

BGD050 CAS: 146479-43-8 HR: 1**BIOPOLYENE****TOXICITY DATA with REFERENCE:**

orl-rat LD :>50 g/kg ANTBAL 37(1),32,92

SAFETY PROFILE: Low toxicity by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BGD075 CAS: 22150-76-1 HR: 2**6-BIOPTERIN**mf: C₉H₁₁N₅O₃ mw: 237.25

SYNS: BIOPTERIN □ L-BIOPTERIN □ 4(1H)-PTERIDINONE, 2-AMINO-6-(1,2-DIHYDROXYPROPYL)-, (S-(R*,S*))-(9CI) □ 4(3H)-PTERIDINONE, 2-AMINO-6-(1-ERYTHRO-1,2-DIHYDROXYPROPYL)- □ PTERIN H B2

TOXICITY DATA with REFERENCE:

sln-par-dmg 10 µg/L MUREAV 128,147,84

orl-mus LD :>3 g/kg TOXID9 6,180,86

ipr-mus LD50:879 mg/kg TOXID9 6,180,86

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.

BGD088 CAS: 205943-18-6 HR: 3**BIOREX**mf: C₂₂H₁₉Cl₂NO₃•C₁₉H₃₀O₅•C₈H₁₀•C₅H₉NO•C₄H₆O₃ mw: 1062.24

SYN: CYCLOPROPANECARBOXYLIC ACID, 3-(2,2-DICHLOROETHENYL)-2,2-DIMETHYL-, CYANO(3-PHENOXYPHENYL) METHYL ESTER, MIXED WITH ACETIC ACID ANHYDRIDE, 5-((2-(2-BUTOXYETHOXY)ETHOXY) METHYL)-6-

PROPYL-1,3-BENZODIOXOLE, DIMETHYLBENZENE AND 1-METHYL 2-PYRROLIDINONE

TOXICITY DATA with REFERENCE:

orl-mus LD50:200 mg/kg VETNAL 73(3),54,1997

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x and Cl₂.

BGD100 CAS: 58-85-5 HR: D
BIOTIN

mf: C₁₀H₁₆N₂O₃S mw: 244.31

PROP: White crystalline powder or fine long needles.

Mp: 232–233°. Sltly sol in water, alc; insol in common org solvs.

SYNS: BIOEPIDERM □ BIOS II □ (+)-BIOTIN □ d-BIOTIN □ D-BIOTIN □ D-(+)-BIOTIN □ COENZYME R □ FACTOR S □ FACTOR S (VITAMIN) □ VITAMIN B7 □ VITAMIN H

CONSENSUS REPORTS: EPA TSCA Chemical Inventory, JUNE 1993.

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x, SO_x.

BGD250 CAS: 20354-26-1 HR: 2
BIOXONE

mf: C₉H₆Cl₂N₂O₃ mw: 261.07

PROP: Light-tan solid. Mp: 123–124°. Very sltly sol in H₂O.

SYNS: 2-(3,4-DICHLOROPHENYL)-4-METHYL-1,2,4-OXADI AZOLIDINE-3,5-DIONE □ METHAZOLE □ OXYDIAZOL □ PAXILON □ PROBE □ TUNIC □ VCS 438

TOXICITY DATA with REFERENCE:

orl-rat LD50:2501 mg/kg FMCHA2 -,C195,83

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of Cl₂ and NO_x.

BGD500 CAS: 514-65-8 HR: 3
BIPERIDEN

mf: C₂₁H₂₉NO mw: 311.51

SYNS: AKINETON □ AKINOPHYL □ BEPERIDEN □ α-(BICYCLO(2.2.1)HEPT-5-EN-2-YL)-α-PHENYL-1-PIPERIDINO PROPANOL □ 1-BICYCLOHEPTENYL-1-PHENYL-3-PIPERIDINO-PROPANOL-1 □ KL 373 □ 3-PIPERIDINO-1-PHENYL-1-BICYCLOHEPTENYL-1-PROPANOL □ 3-PIPERIDINO-1-PHENYL-1-BICYCLO(2.2.1)HEPTEN-(5)-YL-PROPANOL-(1)(GERMAN)

TOXICITY DATA with REFERENCE:

orl-rat LD50:750 mg/kg NIIRDN 6,636,82

orl-mus LD50:530 mg/kg NIIRDN 6,636,82

ipr-mus LD50:161 mg/kg NIIRDN 6,636,82

orl-dog LD50:340 mg/kg NIIRDN 6,636,82

scu-mus LD50:195 mg/kg AIPTAK 128,204,60

ivn-mus LD50:56 mg/kg AIPTAK 128,204,60

SAFETY PROFILE: Poison by ingestion, subcutaneous, intraperitoneal, and intravenous routes. When heated to decomposition, it emits toxic fumes of NO_x.

BGD750 CAS: 1235-82-1 HR: 3
BIPERIDINE HYDROCHLORIDE

mf: C₂₁H₂₉NO•ClH mw: 347.97

SYNS: AKINETON HYDROCHLORIDE □ AKINOPHYL □ α-BICYCLO(2.2.1)HEPT-5-EN-1-YL-α-PHENYL-PIPERIDINE PROPANOL HYDROCHLORIDE □ α-(BICYCLO(2.2.1)HEPT-5-EN-2-YL)-α-PHENYL-1-PIPERIDINEPROPANOL HYDROCHLORIDE □ 1-BICYCLOHEPTENYL-1-PHENYL-3-PIPERIDINOPROPANOL-1 HYDROCHLORIDE □ BIPERIDEN HYDROCHLORIDE □ α-5-NORBORNEN-2-YL-α-PHENYL-PIPERIDINE PROPANOL HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-rat LD50:750 mg/kg TXAPA9 2,379,60

orl-mus LD50:545 mg/kg 29ZVAB -,17,69

ivn-mus LD50:56 mg/kg MEIEDD 10,175,83

orl-dog LD50:340 mg/kg TXAPA9 2,379,60

SAFETY PROFILE: Poison by ingestion and intravenous routes. When heated to decomposition it emits very toxic fumes of NO_x and HCl. See also BIPERIDIN.

BGE000 CAS: 92-52-4 HR: 3
BIPHENYL

mf: C₁₂H₁₀ mw: 154.22

PROP: Monoclinic, white scales, with a pleasant odor.

Mp: 71°, bp: 255°, flash p: 235°F (CC), d: 0.991 @ 75°/4°, autoign temp: 1004°F, vap d: 5.31, lel: 0.6% @ 232°, uel: 5.8% @ 331°F. IDLH 100 mg/m³.

SYNS: BIBENZENE □ 1,1'-BIPHENYL □ DIPHENYL (OSHA) □ LEMONENE □ PHENADOR-X □ PHENYLBENZENE □ PHPH □ XENENE

TOXICITY DATA with REFERENCE:

eye-rbt 100 mg MLD MONS** 99,37,89

sce-ham:fbr 100 μmol/L JNCIAM 58,1635,77

ihl-hmn TCLo:4400 μg/m³:IRR AEHLAU 26,70,73

orl-rat LD50:2400 mg/kg MONS** 24,268,83

ivn-mus LD50:56 mg/kg CSLNX* NX#00198

orl-rbt LD50:2400 mg/kg NASDA6 28,983,77

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory. Community Right-To-Know List.

OSHA PEL: TWA 0.2 ppm

ACGIH TLV: TWA 0.2 ppm

DFG MAK: 0.16 ppm (1 mg/m³)

SAFETY PROFILE: Poison by intravenous route. Moderately toxic by ingestion. A powerful irritant by inhalation in humans. Human systemic effects by inhalation of very small amounts: flaccid paralysis, nausea or vomiting, and other unspecified gastrointestinal effects. Questionable carcinogen with experimental tumorigenic and neoplastigenic data. Mutation data reported. Combustible when exposed to heat or flame; can react with oxidizing materials. To fight fire, use CO₂, dry chemical, water spray, mist, fog. When heated to decomposition it emits acrid smoke and fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Biphenyl, 2530.

BGE125 CAS: 5728-52-9 HR: 3
4-BIPHENYLACETIC ACID

mf: C₁₄H₁₂O₂ mw: 212.25

PROP: Crystals from AcOH. Mp: 164–165°.

SYNS: (4-BIPHENYL) ACETIC ACID □ (1,1'-BIPHENYL)-4-ACETIC ACID □ p-BIPHENYLACETIC ACID □ 4-BIPHENYL ACETIC ACID □ 4-CARBOXYMETHYLBIPHENYL □ LY 61017

TOXICITY DATA with REFERENCE:

orl-rat LD50:410 mg/kg KSRNAM 20,2107,86
 ipr-rat LD50:495 mg/kg KSRNAM 20,2107,86
 scu-rat LD50:148 mg/kg KSRNAM 20,2107,86
 orl-mus LD50:675 mg/kg KSRNAM 20,2107,86
 ipr-mus LD50:508 mg/kg KSRNAM 20,2107,86
 scu-mus LD50:730 mg/kg KSRNAM 20,2107,86
 scu-dog LD50:320 mg/kg KSRNAM 20,2107,86
 scu-rbt LD50:1280 mg/kg KSRNAM 20,2107,86

SAFETY PROFILE: Poison by subcutaneous route. Moderately toxic by ingestion and intraperitoneal routes. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits acrid smoke and fumes.

**BGE250 CAS: 90-41-5 HR: 2
2-BIPHENYLAMINE**

mf: C₁₂H₁₁N mw: 169.24

PROP: Crystals from EtOH (aq). Mp: 49–50°, bp: 299°.

SYNS: o-AMINOBI-PHENYL □ 2-AMINOBI-PHENYL □ o-AMINO DIPHENYL □ 2-AMINODIPHENYL □ o-BIPHENYL AMINE □ (1,1'-BIPHENYL)-2-AMINE (9CI) □ o-PHENYLANILINE □ 2-PHENYLANILINE

TOXICITY DATA with REFERENCE:

mmo-sat 33 µg/plate ENMUDM 5(Suppl 1),3,83
 pic-esc 250 mg/L CNREA8 41,532,81
 orl-rat LD50:2340 mg/kg JIHTAB 29,1,47
 orl-rbt LD50:1020 mg/kg JIHTAB 29,1,47

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. Mutation data reported. When heated to decomposition, it emits toxic fumes of NO_x. See also AROMATIC AMINES.

**BGE300 HR: 2
4-BIPHENYLAMINE, DIHYDROCHLORIDE**

mf: C₁₂H₁₁N•2ClH mw: 242.16

SYN: 4-AMINOBI-PHENYL DIHYDROCHLORIDE

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits toxic fumes of NO_x and HCl.

**BGE325 CAS: 2185-92-4 HR: 2
2-BIPHENYLAMINE, HYDROCHLORIDE**

mf: C₁₂H₁₁N•ClH mw: 205.70

SYN: NCI-C50282

TOXICITY DATA with REFERENCE:

mma-sat 10 µg/plate SCIEAS 236,933,87
 mma-mus:lyms 110 mg/L EMMUEG 12,85,88
 cyt-ham:ovr 200 mg/L SCIEAS 236,933,87

CONSENSUS REPORTS: NCI Carcinogenesis Studies (feed): Clear Evidence: mouse NTPTR* NTP-TR-233,82; No Evidence: rat NTPTR* NTP-TR-233,82

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x and HCl.

**BGF000 CAS: 20743-57-1 HR: 2
N-4-BIPHENYLBENZAMIDE**

mf: C₁₉H₁₅NO mw: 273.35

SYNS: N-4-BIPHENYLYLBENZAMIDE □ 4'-PHENYLBENZANILIDE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of NO_x.

**BGF050 CAS: 77985-00-3 HR: 3
(4-BIPHENYLCARBONYLMETHYL)DIMETHYL(2-HYDROXYETHYL)AMMONIUM BROMIDE**

mf: C₁₈H₂₂NO₂•Br mw: 364.32

SYN: AMMONIUM, (4-BIPHENYLCARBONYLMETHYL)DIMETHYL(2-HYDROXYETHYL)-, BROMIDE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:2500 µg/kg JPETAB 115,127,1955

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Br⁻.

**BGF109 CAS: 492-17-1 HR: 3
2,4'-BIPHENYLDIAMINE**

mf: C₁₂H₁₂N₂ mw: 184.26

PROP: Needles from alc (aq), very sltly sol in alc and ether. Mp: 56°, bp: 363°.

SYNS: o,p'-BIANILINE □ (1,1'-BIPHENYL)-2,4'-DIAMINE □ o,p'-DIAMINOBI-PHENYL □ 2,4'-DIAMINODIPHENYL □ o,p'-DIANILINE □ DIFENYLIN □ 2,4'-DIPHENYLDIAMINE □ DIPHENYLINE

TOXICITY DATA with REFERENCE:

mma-sat 100 µg/plate MUREAV 149,9,85
 orl-rat LD50:311 mg/kg NEOLA4 15,3,68

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Inadequate Evidence IMEMDT 16,313,78

SAFETY PROFILE: A poison by ingestion. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x. See also AROMATIC AMINES.

**BGF250 CAS: 1591-30-6 HR: 3
4,4'-BIPHENYLDICARBONITRILE**

mf: C₁₄H₈N₂ mw: 204.24

PROP: Solid. Mp: 234°.

SYN: NCR DR DCN

TOXICITY DATA with REFERENCE:

ipr-mus LD50:75 mg/kg NTIS** AD691-490

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Cyanide and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Poison by intraperitoneal route. See also NITRILES. When heated to decomposition it emits toxic fumes of NO_x and CN⁻.

**BGF500 HR: 3
2,2-BIPHENYL DICARBONYL PEROXIDE**

mf: C₁₄H₈O₄ mw: 200.21

SAFETY PROFILE: An explosive that detonates violently on impact or on heating to 70°. Upon decomposition it emits acrid smoke and fumes. See also PEROXIDES.

BGF899 CAS: 1137-79-7 HR: 2**4-BIPHENYLDIMETHYLAMINE**mf: C₁₄H₁₅N mw: 197.30**SYN:** 4-DIMETHYLAMINOBIHENYL**SAFETY PROFILE:** Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits toxic fumes of NO_x. See also AROMATIC AMINES.**BGG000 CAS: 1806-29-7 HR: 3****2,2'-BIPHENYLDIOL**mf: C₁₂H₁₀O₂ mw: 186.22**PROP:** Prisms from toluene; hydrated crystals from H₂O. Mp: 109° (anhyd), mp: 73–75° (hydrate), bp: 325–326°.**SYNS:** o,o'-BIPHENOL □ 2,2'-BIPHENOL □ 2,2'-DIHYDROXY BIPHENYL**TOXICITY DATA with REFERENCE:**

oms-hmn:lym 5 µmol/L CNREA8 45,2471,85

sce-hmn:lym 300 µmol/L CNREA8 45,2471,85

ipr-mus LD50:150 mg/kg NTIS** AD691-490

ivn-mus LD50:56 mg/kg CSLNX* NX#07870

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal and intravenous routes. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.**BGF910 CAS: 134-52-1 HR: 3****2,4-BIPHENYLDIOL**mf: C₁₂H₁₀O₂ mw: 186.21**SYN:** (1,1'-BIPHENYL)-2,4-DIOL**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:100 mg/kg VCVGK*,241,1994

skn-rbt LD50:780 mg/kg VCVGK*,241,1994

SAFETY PROFILE: A poison by intraperitoneal and skin contact routes. When heated to decomposition it emits acrid smoke and irritating vapors.**BGG250 CAS: 1079-21-6 HR: 3****2,5-BIPHENYLDIOL**mf: C₁₂H₁₀O₂ mw: 186.22**PROP:** Needles from EtOH (aq). Mp: 96–98°.**SYNS:** (1,1'-BIPHENYL)-2,5-DIOL □ 2,5-DIHYDROXYBIPHENYL □ HYDROQUINONE, PHENYL- □ PHENYLHYDROQUINONE □ o-PHENYLHYDROQUINONE □ 2-PHENYLHYDROQUINONE**TOXICITY DATA with REFERENCE:**

dnd-esc 10 µmol/L CBINA8 76,163,90

add-hmn:leu 100 µmol/L CRNGDP 13,137,92

ipr-mus LDLo:250 mg/kg CBCCT* 6,222,54

ivn-mus LD50:22 mg/kg BJPCAL 22,221,64

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal and intravenous routes. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.**BGG500 CAS: 92-88-6 HR: 3****4,4'-BIPHENYLDIOL**mf: C₁₂H₁₀O₂ mw: 186.22**PROP:** Needles or plates from EtOH. Mp: 286°.**SYNS:** p,p'-BIPHENOL □ USAF DO-30**TOXICITY DATA with REFERENCE:**

oms-hmn:lym 100 nmol/L CNREA8 45,2471,85

sce-hmn:lym 5 µmol/L CNREA8 45,2471,85

orl-rat LD50:9850 mg/kg TXAPA9 28,313,74

ipr-mus LD50:100 mg/kg NTIS** AD277-689

skn-rbt LD50:1780 mg/kg TXAPA9 28,313,74

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal route. Moderately toxic by skin contact. Mildly toxic by ingestion. Human mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes.**BGH000 CAS: 20275-19-8 HR: 3****1,1'-(p,p'-BIPHENYLENEBIS(CARBONYLMETHYL))DI-2-PICOLINIUM DIBROMIDE**mf: C₂₈H₂₆N₂O₂•2Br mw: 582.38**SYN:** (4,4'-BIPHENYLYLENEBIS(2-OXOETHYLENE))-2-PICOLINIUM DIBROMIDE**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:1500 µg/kg JAPMA8 43,79,54

ivn-mus LD50:2900 µg/kg TXAPA9 27,666,74

SAFETY PROFILE: Deadly poison by intraperitoneal and intravenous routes. See also BROMIDES. When heated to decomposition it emits very toxic fumes of NO_x and Br⁻.**BGH250 CAS: 73-51-8 HR: 3****4,4'-BIPHENYLENEBIS(2-OXOETHYLENE) BIS(DIMETHYL(2-HYDROXYETHYL)-AMMONIUM) DIBROMIDE**mf: C₂₄H₃₄N₂O₄•2Br mw: 574.42**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:45 µg/kg JPETAB 115,127,55

ipr-mus LD50:20 µg/kg JPETAB 115,127,55

ivn-dog LDLo:75 µg/kg JPETAB 115,127,55

ivn-rbt LDLo:50 µg/kg JPETAB 115,127,55

ipr-gpg LDLo:30 µg/kg JPETAB 115,127,55

SAFETY PROFILE: Deadly poison by intraperitoneal and intravenous routes. See also BROMIDES. When heated to decomposition it emits very toxic fumes of NO_x, NH₃, and Br⁻.**BGH500 CAS: 77967-05-6 HR: 3****4,4'-BIPHENYLENEBIS(3-OXOPROPYLENE) BIS(DIMETHYL(2-HYDROXYETHYL)-AMMONIUM) DIBROMIDE**mf: C₂₆H₃₈N₂O₄•2Br mw: 602.48**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:10 mg/kg JPETAB 115,127,55

ipr-rbt LD50:20 mg/kg JPETAB 115,127,55

SAFETY PROFILE: Poison by intraperitoneal route. See also BROMIDES. When heated to decomposition it emits very toxic fumes of NO_x, NH₃, and Br⁻.**BGI250 CAS: 6810-26-0 HR: 2****4-BIPHENYLHYDROXYLAMINE**

mf: C₁₂H₁₁NO mw: 185.24

SYNS: (1,1'-BIPHENYL)-4-AMINE, N-HYDROXY- □ N-4-BIPHENYLYLHYDROXYLAMINE □ N-HYDROXY-4-AMINOBIIPHENYL □ 4-HYDROXYAMINOBIIPHENYL □ 4-HYDROXYLAMINOBIIPHENYL

TOXICITY DATA with REFERENCE:

mmo-sat 5 µg/plate MUREAV 151,201,85
mmo-esc 2500 nmol/L MUREAV 151,201,85
dns-hmn:oth 1 µmol/L JJIND8 72,847,84
dns-rat:lvf 5 µmol/L ENMUDM 3,11,81
dns-rbt:oth 10 µmol/L CNREA8 45,221,85

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. Human mutation data reported. When heated to decomposition it emits highly toxic fumes of NO_x. See also AROMATIC AMINES.

BGJ250 CAS: 90-43-7 HR: 3
2-BIPHENYLOL

mf: C₁₂H₁₀O mw: 170.22

PROP: Needles from pet ether. Mp: 56°, bp: 275°.

SYNS: o-BIPHENYLOL □ (1,1'-BIPHENYL)-2-OL □ o-DIPHENYL OL □ DOWCIDE 1 □ DOWCIDE 1 ANTIMICROBIAL □ 2-HYDROXYBIFENYL (CZECH) □ o-HYDROXYBIPHENYL □ 2-HYDROXYBIPHENYL □ o-HYDROXYDIPHENYL □ 2-HYDROXY DIPHENYL □ KIWI LUSTR 277 □ NCI-C50351 □ OPP □ ORTHO HYDROXYDIPHENYL □ ORTHOPHENYLPHENOL □ ORTHO XENOL □ o-PHENYLPHENOL □ 2-PHENYLPHENOL □ PREVENTOL O EXTRA □ REMOL TRF □ TETROSIN OE □ TORSITE □ TUMESCAL OPE □ USAF EK-2219 □ o-XENOL

TOXICITY DATA with REFERENCE:

skn-rbt 250 mg MccSB# 15JUN84
skn-rbt 20 mg/24H MOD 85JCAE -,228,86
eye-rbt 50 µg/24H SEV 85JCAE -,228,86
mmo-sat 60 µg/plate ENMUDM 5(Suppl 1),3,83
cyt-hmn:fbr 200 µg/L MUREAV 54,255,78
msc-hmn:emb 20 mg/L MUREAV 156,123,85
msc-hmn:oth 15 mg/L TRENAF 35,399,84
cyt-ham:ovr 100 mg/L MUREAV 141,95,84
orl-rat LD50:2000 mg/kg NNGADV 3,365,78
unr-rat LD50:2700 mg/kg TRENAF 29,89,78
orl-mus LD50:1050 mg/kg NAIZAM 32,425,81
ipr-mus LD50:50 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Inadequate Evidence IMEMDT 30,329,83; NTP Carcinogenesis Studies (dermal); No Evidence: mouse NTPTR* NTP-TR-301,86. Reported in EPA TSCA Inventory. On Community Right-To-Know List.

SAFETY PROFILE: A poison by intraperitoneal route. Moderately toxic by ingestion and possibly other routes. An experimental teratogen. Other experimental reproductive effects. Human mutation data reported. Severe eye and moderate skin irritant. Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits acrid smoke and irritating fumes.

BGJ500 CAS: 92-69-3 HR: 3
4-BIPHENYLOL

mf: C₁₂H₁₀O mw: 170.22

PROP: Needles or plates from EtOH (aq). Mp: 164–165°, bp: 305–308°.

SYNS: p-HYDROXYBIPHENYL □ 4-HYDROXYBIPHENYL □ p-HYDROXYDIPHENYL □ 4-HYDROXYDIPHENYL □ PARA XENOL □ p-PHENYLPHENOL □ 4-PHENYLPHENOL

TOXICITY DATA with REFERENCE:

ipr-mus LD50:150 mg/kg NTIS** AD691-490

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Acute poison by intraperitoneal route. Questionable carcinogen with experimental carcinogenic and tumorigenic data. When heated to decomposition it emits acrid, irritating fumes.

BGJ750 CAS: 132-27-4 HR: 3
2-BIPHENYLOL, SODIUM SALT

mf: C₁₂H₉O•Na mw: 192.20

SYNS: BACTROL □ (1,1'-BIPHENYL)-2-OL, SODIUM SALT □ D.C.S. □ DORVICIDE A □ DOWICIDE □ DOWICIDE A □ DOWICIDE A & A FLAKES □ DOWIZID A □ 2-HYDROXY BIPHENYL SODIUM SALT □ 2-HYDROXYDIPHENYL SODIUM □ 2-HYDROXYDIPHENYL, SODIUM SALT □ MIL-DU-RID □ MYSTOX WFA □ NATRIPHENE □ OPP-Na □ OPP-SODIUM □ ORPHENOL □ PHENOL, o-PHENYL-, SODIUM deriv. □ o-PHENYLPHENOL, SODIUM SALT □ 2-PHENYLPHENOL SODIUM SALT □ PREVENTOL-ON □ PREVENTOL ON & ON EXTRA □ SODIUM 2-BIPHENYLOLATE □ SODIUM (1,1'-BIPHENYL)-2-OLATE □ SODIUM, (2-BIPHENYLOXY)- □ SODIUM 2-HYDROXYDIPHENYL □ SODIUM ORTHO PHENYLPHENATE □ SODIUM o-PHENYLPHENATE □ SODIUM 2-PHENYLPHENATE □ SODIUM o-PHENYLPHENOL □ SODIUM o-PHENYL PHENOLATE □ SODIUM o-PHENYLPHENOXIDE □ SOPP □ STOPMOLD B □ TOPANE

TOXICITY DATA with REFERENCE:

skn-hmn 1 mg MccSB# 15JUN84
skn-rbt 50 mg/24H SEV MccSB# 15JUN84
mmo-asn 16 µmol/L PHYTAJ 66,217,76
sln-asn 52 µmol/L EVHPAZ 31,81,79
orl-rat LD50:656 mg/kg TRENAF 30(2),57,79
orl-mus LD50:683 mg/kg FAONAU 38A,47,65
orl-cat LD50:500 mg/kg TRENAF 30,54,79
orl-cat LD50:500 mg/kg FAONAU 38A,47,65

CONSENSUS REPORTS: IARC Cancer Review: Group 2B IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 30,329,83. Reported in EPA TSCA Inventory.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Moderately toxic by ingestion. Experimental teratogenic and reproductive effects. A human skin irritant. A severe skin irritant to experimental animals. When heated to decomposition it emits toxic fumes of Na₂O. See also 2-BIPHENYLOL.

BGK000 CAS: 3644-37-9 HR: 3
(2-BIPHENYLOXY)TRIBUTYL TIN

mf: C₂₄H₃₇OSn mw: 460.30

SYNS: ((2-BIPHENYLOXY)TRIBUTYL)STANNANE □ ((1,1'-BIPHENYL)-2-YLOXY)TRIBUTYL-(9CI) STANNANE □ TRIBUTYL-o-PHENYLPHENOXYTIN □ TRIBUTYL TIN-o-PHENYLPHENOXYTIN

TOXICITY DATA with REFERENCE:

ivn-mus LD50:100 mg/kg CSLNX* NX#01826

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)

ACGIH TLV: TWA 0.1 mg(Sn)/m³; STEL 0.2 mg(Sn)/m³ (skin).

NIOSH REL: (Organotin Compounds) TWA 0.1 mg(Sn)/m³

SAFETY PROFILE: Poison by intravenous route. See also TIN COMPOUNDS. When heated to decomposition it emits acrid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

BGK250 CAS: 304-43-8 HR: 2
2-BIPHENYLPENICILLIN SODIUM

mf: C₂₁H₂₀N₂O₄S mw: 396.49

SYNS: (2-BIPHENYLYL)PENICILLIN □ DIPHENICILLIN □ SKF 12141

TOXICITY DATA with REFERENCE:

orl-mus LD50:5600 mg/kg 85ERAY 3,1663,78

ivn-mus LD50:1030 mg/kg FATOAO 31,232,68

SAFETY PROFILE: Moderately toxic by intravenous route. Mildly toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x and SO_x. See other penicillin entries.

BGK500 CAS: 91-95-2 HR: 3
3,3',4,4'-BIPHENYLTETRAMINE

mf: C₁₂H₁₄N₄ mw: 214.30

PROP: Crystals from MeOH. Mp: 178–179°.

SYNS: 3,3'-DIAMINOBENZIDENE □ 3,3',4,4'-

DIPHENYLTETRAMINE □ 3,3',4,4'-TETRAAMINOBIPHENYL

TOXICITY DATA with REFERENCE:

mma-sat 100 µg/plate BJCAAI 37,873,78

dnd-esc 20 µmol/L MUREAV 89,95,81

mno-smc 140 µmol/L MGGEAE 174,39,79

dns-rat:lv 500 µmol/L ENMUDM 3,11,81

orl-rat LDLo:3000 mg/kg CNREA8 26,619,66

orl-mus LD50:1834 mg/kg GISAAA 46(1),94,81

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DFG MAK: Confirmed Animal Carcinogen with Unknown Relevance to Humans

SAFETY PROFILE: Suspected carcinogen with experimental tumorigenic data. Moderately toxic by ingestion. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x. See also AROMATIC AMINES.

BGK750 CAS: 7411-49-6 HR: 3
3,3',4,4'-BIPHENYLTETRAMINETETRA-HYDROCHLORIDE

mf: C₁₂H₁₄N₄•4ClH mw: 360.14

PROP: Crystals. Sol in acids.

SYNS: 3,3'-DIAMINOBENZIDINE TETRAHYDROCHLORIDE □ 3,3',4,4'-TETRAAMINOBIPHENYL TETRAHYDROCHLORIDE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:330 mg/kg NCIBR* NIH-NCI-E-68-1311,10,73

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DFG MAK: Confirmed Animal Carcinogen with Unknown Relevance to Humans

SAFETY PROFILE: Suspected carcinogen with experimental neoplastigenic and tumorigenic data. Poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of HCl and NO_x. See also AROMATIC AMINES.

BGL000 CAS: 13607-48-2 HR: 2
N-4-BIPHENYLYLBENZENESULFONAMIDE

mf: C₁₈H₁₅NO₂S mw: 309.40

SYN: N-4-BIPHENYLYL BENZENESULFONAMIDE

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also SULFONATES. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.

BGL250 CAS: 36330-85-5 HR: 3
3-(4-BIPHENYLYLCARBONYL)PROPIONIC ACID

mf: C₁₆H₁₄O₃ mw: 254.30

PROP: Solid. Mp: 185–187°.

SYNS: 4-(4-BIPHENYLYL)-4-OXOBUTYRIC ACID □ BUFEMID □ CINOPAL □ CINOPOL □ CL82204 □ DIPHENYL-4-γ-OXO-γ-BUTYRIC ACID □ FENBUFEN □ LEDERFEN □ γ-OXO(1,1-BIPHENYL)-4-BUTANOIC ACID □ β_p-PHENYLBENZOYL PROPIONIC ACID

TOXICITY DATA with REFERENCE:

orl-wmn TDLo:12 mg/kg/1D-I BMJOAE 290,822,85

orl-man TDLo:90 mg/kg/1W-I:PUL HUTODJ 7,35,88

orl-rat LD50:200 mg/kg ARZNAD 30,725,80

ipr-rat LD50:265 mg/kg ARZNAD 30,721,80

scu-rat LD50:247 mg/kg ARZNAD 30,721,80

orl-mus LD50:795 mg/kg ARZNAD 30,721,80

ipr-mus LD50:482 mg/kg PCIPDV 15,132,83

scu-mus LD50:1189 mg/kg IYKEDH 10,884,79

SAFETY PROFILE: Poison by ingestion, intraperitoneal, and subcutaneous routes. Human systemic effects by ingestion: cough, sweating, body temperature. An experimental teratogen. Other experimental reproductive effects. An anti-inflammatory agent. When heated to decomposition it emits acrid smoke and irritating fumes.

BGL400 CAS: 27695-61-0 HR: 3
1-(1,1'-BIPHENYL)-4-YL-2-((4-(DICHLORO ACETYL)PHENYL)AMINO)-2-HYDROXY ETHANONE

mf: C₂₂H₁₇Cl₂NO₃ mw: 414.30

SYNS: ETHANONE, 1-(1,1'-BIPHENYL)-4-YL-2-((4-(DICHLORO ACETYL)PHENYL)AMINO)-2-HYDROXY- □ KETONE, 1-(1,1'-BIPHENYL)-4-YL-2-((4-(DICHLOROACETYL) PHENYL)AMINO)-2-HYDROXY-

TOXICITY DATA with REFERENCE:

ipr-mus LD50:3 g/kg ARZNAD 23,573,73

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: Low toxicity by intraperitoneal route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x and Cl₂.

BGL450 CAS: 75318-64-8 HR: 2
2-(4-BIPHENYLYL)-5,6-DIHYDRO-S-TRAIZOLO

(5,1-A)ISOQUINOLINEmf: C₂₂H₁₇N₃ mw: 323.42**SYNS:** (1,2,4)TRIAZOLO(5,1-A)ISOQUINOLINE, 2-(1,1'-BIPHENYL)-4-YL-5,6-DIHYDRO- □ L 13891 □ s-TRIAZOLO(5,1-A)ISOQUINOLINE, 5,6-DIHYDRO-2-(4-BIPHENYLYL)-**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:600 mg/kg USXXAM #4313950

SAFETY PROFILE: Moderately toxic by intraperitoneal route. Experimental reproductive effects. When heated to decomposition it emits toxic vapors of NO_x.**BGL500 CAS: 7203-95-4 HR: 3
1-BIPHENYLYL-3,3-DIMETHYLTRIAZENE**mf: C₁₄H₁₅N₃ mw: 225.32**SYNS:** 3,3-DIMETHYL-1-XENYL-TRIAZENE □ 1-XENYL-3,3-DIMETHYLTRIAZIN (CZECH)**TOXICITY DATA with REFERENCE:**

mmo-sat 21 nmol/L JMCMA 22,473,79

orl-rat LD50:347 mg/kg 28ZPAK -,77,72

ipr-mus LD50:344 mg/kg JMCMA 19,1299,76

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.**BGM000 CAS: 18355-50-5 HR: 3
7,7'-(p,p'-BIPHENYLYLENEBIS(CARBONYL-
IMINO))BIS(2-ETHYLQUINOLINIUM)
DITOSYLATE**mf: C₃₆H₃₂N₄O₂•2C₇H₇O₃S mw: 895.12**SYN:** 7,7'-(4,4'-BIPHENYLYLENEBIS(CARBONYLIMINO)) BIS(1-ETHYLQUINOLINIUM)DI-p-TOLUENESULFONATE**TOXICITY DATA with REFERENCE:**

add-mus:lym 300 nmol/L JMCMA 22,134,79

ipr-mus LD10:31 mg/kg JMCMA 22,134,79

SAFETY PROFILE: Poison by intraperitoneal route. See also SULFONATES. Mutation data reported. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.**BGM050 CAS: 63906-07-0 HR: 3
(4,4'-BIPHENYLYLENEBIS(2-OXOETHYLENE))
BIS(3-IODOPYRIDINIUM) DIBROMIDE**mf: C₂₆H₂₀I₂N₂O₂•2Br mw: 806.10**SYN:** PYRIDINIUM, (4,4'-BIPHENYLYLENEBIS(2-OXOETHYLENE))BIS(3-iodo-, DIBROMIDE**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:130 µg/kg JPPMA 22,20,1970

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x, Br⁻, and Cl⁻.**BGM070 CAS: 124428-11-1 HR: 2
4-(2-(1,1'-BIPHENYL)-4-YLETHOXY)
QUINAZOLINE**mf: C₂₂H₁₈N₂O mw: 326.42**SYN:** QUINAZOLINE, 4-(2-(1,1'-BIPHENYL)-4-YLETHOXY)-**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1150 mg/kg NTIS** OTS0544207

orl-mus LD50:>500 mg/kg NTIS** OTS0544206

orl-qal LDLo:500 mg/kg NTIS** OTS0545136

SAFETY PROFILE: Moderately toxic by ingestion. Experimental reproductive effects. When heated to decomposition it emits toxic vapors of NO_x.**BGM100 CAS: 37940-57-1 HR: 3
4-BIPHENYLYL ETHYLKETONE**mf: C₁₅H₁₄O mw: 210.29**SYNS:** KETONE, 4-BIPHENYL ETHYL □ 4-PHENYLPROPIOPHENONE □ PROPIOPHENONE, 4'-PHENYL-**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:180 mg/kg CSLNX* NX#04519

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** A poison by intravenous route. A flammable liquid. When heated to decomposition it emits acrid smoke and irritating vapors.**BGN000 CAS: 29968-68-1 HR: 2
N-4-BIPHENYLYL-N-HYDROXYBENZENE
SULFONAMIDE**mf: C₁₈H₁₅NO₃S mw: 325.40**SYN:** HYDROXY-4-BIPHENYLYLBENZENESULFONAMIDE**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. See also SULFONATES. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.**BGN100 CAS: 5555-13-5 HR: 3
α-(4-BIPHENYLYLOXY)PROPIONIC ACID**mf: C₁₅H₁₄O₃ mw: 242.29**SYNS:** PROPIONIC ACID, 2-(4-BIPHENYLYLOXY)- □ α-(4-PHENYLPHENOXY)PROPIONIC ACID □ PROPANOIC ACID, 2-((1,1'-BIPHENYL)-4-YLOXY)-**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:180 mg/kg CSLNX* NX#02798

SAFETY PROFILE: A poison by intravenous route. When heated to decomposition it emits acrid smoke and irritating vapors.**BGO000 CAS: 1734-91-4 HR: 3
2-(2-BIPHENYLYLOXY)TRIETHYLAMINE
HYDROCHLORIDE**mf: C₁₈H₂₃NO•ClH mw: 305.88**SYNS:** DACORENE HYDROCHLORIDE □ 2-(DIETHYLAMINOETHOXY)DIPHENYL HCl □ 1262 F □ F 1262**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:125 mg/kg BJPCAL 1,90,46

scu-mus LDLo:125 mg/kg APFRAD 5,7,47

ivn-mus LD50:27 mg/kg BJPCAL 1,90,46

SAFETY PROFILE: Poison by subcutaneous, intraperitoneal and intravenous routes. When heated to decomposition it emits very toxic fumes of NO_x and HCl.**BGO100 CAS: 56073-07-5 HR: 3
3-(3-(4-BIPHENYLYL)-1,2,3,4-TETRAHYDRO-1-NAPHTHYL)-4-HYDROXYCOUMARIN3-(3-(1,1'-BIPHENYL)-4-YL-1,2,3,4-TETRAHYDRO-1-NAPHTHALENYL)-4-HYDROXY-2H-1-BENZO PYRAN-2-ONE**mf: C₃₁H₂₄O₃ mw: 444.55**SYNS:** 2H-1-BENZOPYRAN-2-ONE,3-(3-(1,1'-BIPHENYL)-4-YL-1,2,3,4-TETRAHYDRO-1-NAPHTHALENYL)-4-HYDROXY- □ 3-(3-

BIPHENYL-4-YL-1,2,3,4-TETRAHYDRO-1-NAPHTHYL)-4-HYDROXYCOUMARIN □ COUMARIN, 3-(3-(4-BIPHENYLYL)-1,2,3,4-TETRAHYDRO-1-NAPHTHYL)-4-HYDROXY- □ DIFENACOU □ DIFENAKUM □ DIPHENACOU □ NEOSOREXA □ NEOSOREXA PP580 □ RATAK □ WBA 8107

TOXICITY DATA with REFERENCE:

orl-rat LD50:680 µg/kg MRBUDF 12,194,1984
skn-rat LD50:>50 mg/kg PEMNDP 9,276,1991
orl-mus LD50:800 µg/kg PEMNDP 9,276,1991
skn-rbt LD50:1 g/kg PEMNDP 9,276,1991
orl-ckn LD50:50 mg/kg DEVEAA 32,27,1978

SAFETY PROFILE: A poison by ingestion and skin contact. When heated to decomposition it emits acrid smoke and irritating vapors.

BGO200 CAS: 75318-65-9 HR: 2 2-(4-BIPHENYLYL)-5H-s-TRIAZOLO(5,1-A)ISOINDOLE

mf: C₂₁H₁₅N₃ mw: 309.39

SYNS: 5H-s-TRIAZOLO(5,1-A)ISOINDOLE, 2-(4-BIPHENYLYL)-□ 5H-(1,2,4)TRIAZOLO(5,1-A)ISOINDOLE, 2-(1,1'-BIPHENYL)-4-YL- □ L 14085

TOXICITY DATA with REFERENCE:

ipr-mus LD50:600 mg/kg USXXAM #4313950

SAFETY PROFILE: Moderately toxic by intraperitoneal route. Experimental reproductive effects. When heated to decomposition it emits toxic vapors of NO_x.

BGO325 CAS: 75318-62-6 HR: D 2-(4-BIPHENYLYL)-s-TRIAZOLO(5,1-a)ISOQUINOLINE

mf: C₂₂H₁₅N₃ mw: 321.40

SYNS: 2-(1,1'-BIPHENYL-4-YL)-s-TRIAZOLE(5,1-a)ISOQUINOLINE □ 2-(1,1'-BIPHENYL)-4-YL-(1,2,4)TRIAZOLO(5,1-a)ISOQUINOLINE (9CI) □ L 14105

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.

BGO500 CAS: 366-18-7 HR: 3 2,2'-BIPYRIDINE

mf: C₁₀H₈N₂ mw: 156.20

PROP: White crystals or prisms from pet ether. Mp: 69.7°, bp: 272–273°. Sol in H₂O, EtOH, Et₂O, C₆H₆, CHCl₃, and dilute acids.

SYNS: BIPYRIDINE □ α,α'-BIPYRIDINE □ 2,2'-BIPYRIDYL □ 2,2'-BYPYRIDIN □ CI-588 □ α,α'-DIPYRIDYL □ 2,2'-DIPYRIDYL

TOXICITY DATA with REFERENCE:

mno-sat 20 µg/plate ABCHA6 45,327,81
mma-sat 20 µg/plate ABCHA6 45,327,81
orl-rat LD50:100 mg/kg JTEHD6 10,363,82
ipr-rat LD50:150 mg/kg PJPPAA 27,619,75
scu-rat LD50:131 mg/kg JPETAB 135,317,62
ipr-mus LD50:200 mg/kg JPETAB 196,478,76

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, subcutaneous, and intraperitoneal routes. Experimental teratogenic data. Questionable carcinogen with experimental tumorigenic data. Mutation data reported.

When heated to decomposition it emits toxic fumes of NO_x.

BGO600 CAS: 553-26-4 HR: 3 4,4'-BIPYRIDINE

mf: C₁₀H₈N₂ mw: 156.20

SYNS: γ,γ'-BIPYRIDYL □ 4,4-BIPYRIDYL □ 4,4'-BIPYRIDYL □ 4,4'-DIPYRIDINE □ γ,γ'-DIPYRIDYL □ 4,4-DIPYRIDYL □ 4,4'-DIPYRIDYL □ 4-(4-PYRIDYL)PYRIDINE

TOXICITY DATA with REFERENCE:

orl-rat LD50:172 mg/kg JTEHD6 10,363,82

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x.

BGO750 CAS: 8001-88-5 HR: 2 BIRCH TAR OIL

PROP: Brown liquid; leather-like odor. D: 0.886–0.950.

Found in the tar of the bark and wood of *Betula pendula* Roth (Fam. *Betulaceae*) and prepared by steam distillation of the tar obtained by dry distillation of the bark and wood (FCTXAV 11,1011,73). Sol in fixed oils; insol in glycerin, mineral oil, and propylene glycol.

SYN: BIRCH TAR OIL, RECTIFIED (FCC)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H FCTXAV 11,1037,73

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A skin irritant. Moderately irritating to eyes and mucous membranes. A mild allergen. Combustible when exposed to heat or flame; can react with oxidizing materials.

BGO775 CAS: 515-69-5 HR: 2 BISABOLOL

mf: C₁₅H₂₆O mw: 222.41

SYNS: (–)-α-BISABOLOL □ α-4-DIMETHYL-α-(4-METHYL-3-PENTENYL)-3-CYCLOHEXENE-1-METHANOL □ 5-HEPTEN-2-OL, 6-METHYL-2-(4-METHYL-3-CYCLOHEXEN-1-YL)- □ 6-METHYL-2-(4-METHYL-3-CYCLOHEXEN-1-YL)-5-HEPTEN-2-OL

TOXICITY DATA with REFERENCE:

orl-rat LD50:14,850 mg/kg ARZNAD 19,615,69
orl-mus LD50:11,350 mg/kg ARZNAD 19,615,69

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating vapors.

BGP250 CAS: 304-28-9 HR: 3 2,7-BIS(ACETAMIDO)FLUORENE

mf: C₁₇H₁₆N₂O₂ mw: 280.35

SYNS: 2,7-DIACETAMIDOFLUORENE □ 2,7-DIACETYLAMINOFLUORENE □ 2,7-FAA □ N,N'-FLUOREN-2,7-YLBISACETAMIDE □ 2,7-FLUORENYLBISACETAMIDE □ N,N'-FLUOREN-2,7-YLENEBISACETAMIDE □ N,N'-2,7-FLUORENYLENEBISACETAMIDE □ N,N'-(FLUOREN-2,7-YLENE)BIS(ACETYLAMINE) □ N,N'-2,7-FLUORENYLENEBISACETAMIDE

TOXICITY DATA with REFERENCE:

mno-sat 100 µg/plate PNASA6 69,3128,72

mma-sat 10 µg/plate PNASA6 72,5135,75
 dns-rat:ivr 500 nmol/L ENMUDM 3,11,81
 cyt-rat-orl 315 mg/kg/3W JNCIAM 54,1245,75

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

BGP500 CAS: 63981-20-4 HR: 2
BIS-4-ACETAMINO PHENYL SELENIUMDI
HYDROXIDE

mf: C₈H₁₁NO₃•Se mw: 248.16

CONSENSUS REPORTS: Selenium and its compounds are on the Community Right-To-Know List

OSHA PEL: TWA 0.2 mg(Se)/m³

ACGIH TLV: TWA 0.2 mg(Se)/m³

DFG MAK: 0.1 mg(Se)/m³

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of NO_x and Se. See also SELENIUM COMPOUNDS.

BGP750 CAS: 15172-86-8 HR: 3
4,4'-BISACETOPHENONE-α,α'-DI(3-METHYL
PYRIDINIUM) DIBROMIDE

mf: C₂₈H₂₆N₂O₂•2Br mw: 582.38

SYN: (4,4'-BIPHENYLYLENEBIS(2-OXOETHYLENE))-3-PICOLINIUM DIBROMIDE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:50 µg/kg JAPMA8 43,79,54

ivn-mus LD50:69 µg/kg TXAPA9 27,666,74

SAFETY PROFILE: Deadly poison by intraperitoneal and intravenous routes. See also BROMIDES. When heated to decomposition it emits very toxic fumes of Br⁻ and NO_x.

BGQ000 CAS: 5967-09-9 HR: 3
BIS(ACETOXYDIBUTYLSTANNANE) OXIDE

mf: C₂₀H₄₂O₅Sn₂ mw: 600.00

SYNS: BIS(DIBUTYLACETOXYTIN)OXIDE □ DIACETOXY TETRABUTYLDISTANNOXANE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:320 mg/kg CSLNX* NX#02081

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)

ACGIH TLV: TWA 0.1 mg(Sn)/m³; STEL 0.2 mg(Sn)/m³ (skin).

NIOSH REL: (Organotin Compounds) TWA 0.1 mg(Sn)/m³

SAFETY PROFILE: Poison by intravenous route. See also TIN COMPOUNDS. When heated to decomposition it emits acid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

BGQ050 CAS: 5338-18-1 HR: 2
N,N-BIS(ACETOXYETHYL)ACETAMIDE

mf: C₁₀H₁₇NO₅ mw: 231.28

SYNS: ACETAMIDE, N,N-BIS(2-(ACETYLOXY)ETHYL)- □ ACETAMIDE, N,N-BIS(2-HYDROXYETHYL)-, DIACETATE □ N,N-BIS(2-HYDROXYETHYL)ACETAMIDE DIACETATE

TOXICITY DATA with REFERENCE:

par-mus LDLo:4 g/kg CBCCT* 7,685,1955

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by parenteral route. When heated to decomposition it emits toxic vapors of NO_x.

BGQ100 CAS: 3763-72-2 HR: 1
BIS(2-ACETOXYETHYL)SULFONE

mf: C₈H₁₄O₆S mw: 238.28

SYNS: ETHANOL, 2,2'-SULFONYLBIS-, DIACETATE (9CI) □

ETHANOL, 2,2'-SULFONYLDI-, DIACETATE (7CI,8CI) □

SULFONE, BIS(2-ACETOXYETHYL)

TOXICITY DATA with REFERENCE:

orl-rat LD50:14 g/kg AIHAAP 30,470,69

skn-rbt LD50:11,300 mg/kg AIHAAP 30,470,69

SAFETY PROFILE: Low toxicity by ingestion and skin contact. When heated to decomposition it emits toxic vapors of SO_x.

BGQ250 CAS: 64058-74-8 HR: 3
2,6-BIS(ACETOXYMERCURI)-4-NITROACET
ANILIDE

mf: C₁₂H₁₂Hg₂N₂O₇ mw: 697.44

PROP: IDLH 10 mg/m³ (as Hg).

SYN: BIS(ACETATO-O)(ω-(2-(ACETYLAMINO)-5-NITRO-1,3-PHENYLENE)DI)-MERCURY

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:500 mg/kg NCNSA6 5,10,53

CONSENSUS REPORTS: Mercury and its compounds are on the Community Right-To-Know List.

OSHA PEL: CL 0.1 mg(Hg)/m³ (skin)

ACGIH TLV: TWA 0.1 mg(Hg)/m³ (skin); BEI: 35 µg/g creatinine total inorganic mercury in urine preshift; 15 µg/g creatinine total inorganic mercury in blood at end of shift at end of workweek.

DFG MAK: Confirmed Animal Carcinogen with Unknown Relevance to Humans

NIOSH REL: (Mercury, Aryl and Inorganic) CL 0.1 mg/m³ (skin)

SAFETY PROFILE: Moderately toxic by intraperitoneal route. See also MERCURY COMPOUNDS. When heated to decomposition it emits very toxic fumes of NO_x and Hg.

BGQ300 CAS: 63951-06-4 HR: 3
2,6-BIS(ACETOXYMERCURI)-4-NITROANILINE

SYN: ANILINE, 2,6-BIS(ACETOXYMERCURI)-4-NITRO-

TOXICITY DATA with REFERENCE:

orl-rat LDLo:100 mg/kg NCNSA6 5,12,1953

ipr-rat LDLo:25 mg/kg NCNSA6 5,12,1953

SAFETY PROFILE: A poison by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic vapors of NO_x and Hg.

BGQ325 CAS: 21327-74-2 HR: D
BIS(p-ACETOXYPHENYL)-2-

METHYLCYCLOHEXYLIDENEMETHANEmf: C₂₄H₂₆O₄ mw: 378.50**SYNS:** 4-((4-(ACETYLOXY)PHENYL)(2-METHYLCYCLOHEXYLIDENE)METHYL)PHENOL ACETATE □ F 6103 □ α-(p-HYDROXY PHENYL)-α-(2-METHYLCYCLOHEXYLIDENE)-p-CRESOL DIACETATE**SAFETY PROFILE:** An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits acrid smoke and fumes.**BGQ750 CAS: 14024-64-7 HR: 2
BIS(ACETYLACETONATO) TITANIUM OXIDE**mf: C₁₀H₁₄O₅Ti mw: 262.14**PROP:** Sol in C₆H₆. Insol in pet ether.**SYNS:** BIS(2,4-PENTANEDIONATO)TITANIUM OXIDE □ TITANIUM ACETONYL ACETONATE □ TITANIUM OXIDE BIS(ACETYLACETONATE) □ TITANIUM, OXOBIS(2,4-PENTANEDIONATO-O,O') □ TITANYL BIS(ACETYLACETONATE)**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:650 mg/kg NCIUS* PH 43-64-886,JUL,68

SAFETY PROFILE: Moderate toxic by intraperitoneal route. Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits acrid smoke and irritating fumes. See also TITANIUM COMPOUNDS.**BGR000 CAS: 13395-16-9 HR: 3
BIS(ACETYL ACETONE)COPPER**mf: C₁₀H₁₄O₄•Cu mw: 261.78**SYNS:** BIS(2,4-PENTANEDIONATO)COPPER □ COPPER(II) ACETYLACETONATE □ COPPER BIS(ACETYLACETONATE) □ COPPER BIS(ACETYLACETONE) □ COPPER BIS(2,4-PENTANEDIONATE) □ COPPER DIACETYLACETONATE □ CUPRIC ACETYLACETONATE**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:19 mg/kg CHTHBK 16,371,71

ivn-mus LD50:10 mg/kg CSLNX* NX#00604

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Copper and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Poison by intravenous and intraperitoneal routes. See also COPPER COMPOUNDS. When heated to decomposition it emits acrid smoke and fumes of Cu.**BGR250 CAS: 22750-65-8 HR: 2
2,5-BIS(ACETYLAMINO)FLUORENE**mf: C₁₇H₁₆N₂O₂ mw: 280.35**SYNS:** N,N'-FLUOREN-2,5-YLENEBISACETAMIDE □ 2,5-FLUORENYLENEBISACETAMIDE**SAFETY PROFILE:** Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits toxic fumes of NO_x.**BGR325 CAS: 50588-13-1 HR: 3
1,1'-((2-β,3-α,5-α,16-β,17-β)-3,17-BIS(ACETYLOXY)ANDROSTANE-2,16-DIYL)BIS(1-METHYLPIPERIDINIUM) DIBROMIDE**mf: C₃₅H₆₀N₂O₄•2Br mw: 732.79**TOXICITY DATA with REFERENCE:**

orl-rat LD50:202 mg/kg IYKEDH 4,90,73

ipr-rat LD50:479 µg/kg IYKEDH 4,90,73
scu-rat LD50:436 µg/kg IYKEDH 4,90,73
ivn-rat LD50:129 µg/kg IYKEDH 4,90,73
orl-mus LD50:21,200 µg/kg IYKEDH 4,90,73
ipr-mus LD50:116 µg/kg IYKEDH 4,90,73
scu-mus LD50:168 µg/kg IYKEDH 4,90,73
ivn-mus LD50:36 µg/kg IYKEDH 4,90,73**SAFETY PROFILE:** Poison by ingestion, subcutaneous, intravenous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x and Br⁻. See also BROMIDES.**BGR500 CAS: 12266-58-9 HR: 3
BIS(ACRYLONITRILE) NICKEL (O)**mf: C₆H₆N₂Ni mw: 164.84**PROP:** Red crystals.**CONSENSUS REPORTS:** NTP 10th Report on Carcinogens. Cyanide and its compounds, as well as nickel and its compounds, are on the Community Right-To-Know List.**SAFETY PROFILE:** Confirmed Human Carcinogen. Ignites spontaneously in air. When heated to decomposition it emits toxic fumes of CN⁻ and NO_x. See also NITRILES and NICKEL COMPOUNDS.**BGR750 CAS: 63906-14-9 HR: 3
1,4-BIS(4-ALDOXIMINOPYRIDINIUM)BUTANE
DIOL-2,3-BIBROMIDE**mf: C₁₆H₂₀N₄O₄•2Br mw: 492.22**SYNS:** 1,4-BIS(4-HYDROXYIMINOMETHYL-PYRIDINIUM-(1))-BUTANEDIOL-2,3 DIBROMID (GERMAN) □ R 21**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:130 mg/kg ARZNAD 14,870,64

ivn-mus LD50:64 mg/kg ARZNAD 14,870,64

ims-mus LD50:148 mg/kg ARZNAD 14,870,64

SAFETY PROFILE: Poison by intraperitoneal, intravenous, and intramuscular routes. See also BROMIDES. When heated to decomposition it emits very toxic fumes of Br⁻ and NO_x.**BGS250 CAS: 114-90-9 HR: 3
1,3-BIS(4-ALDOXIMINOPYRIDINIUM) DIMETHYL
ETHER BICHLORIDE**mf: C₁₄H₁₆N₄O₃•Cl₂ mw: 359.24**PROP:** Solid. Mp: 225° (decomp).**SYNS:** BH 6 □ 1,3-BIS(4-HYDROXYIMINOMETHYL-1-PYRIDINIO)-2-OXAPROPANE DICHLORIDE □ BIS(4-HYDROXYIMINOMETHYLPYRIDINIUM-1-METHYL)ETHER DICHLORIDE □ BIS(ISONICOTINALDOXIME 1-METHYL)ETHER DICHLORIDE □ BU-6 □ N,N-DIMETHYLENE OXIDEBIS(PYRIDINIUM-4-ALDOXIME) DICHLORIDE □ N,N-DIMETHYLENOXID-BIS-(PYRIDINIUM-4-ALDOXIM)-DICHLORID (GERMAN) □ ETHER BIS-14-HYDROXY-IMINO METHYLOPYRIDINE-(1)-METYLODICHLORIDE (POLISH) □ LUEH 6 □ LUH6 □ LUH6 □ LUH6-Cl2 □ LUH6-CHLORIDE □ OBIDOXIME CHLORIDE □ OBIDOXIME DICHLORIDE □ OBIDOXIME HYDROCHLORIDE □ 1,1'-(OXYBIS(METHYLENE))BIS(4-(HYDROXYIMINO)METHYL) PYRIDINIUM DICHLORIDE □ 1,1'-(OXYDIMETHYLENE)BIS(4-FORMYL PYRIDINIUM)DICHLORIDE DIOXIME □ 1,1'-(OXYDIMETHYLENE)BIS(4-FORMYLPYRIDINIUM) DIOXIME DICHLORIDE □

TOKSOBIDIN □ TOXOBIDIN □ TOXOGONIN □

TOXOGONIN DICHLORIDE □ TOXOGONINE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:189 mg/kg RPTOAN 38,168,75

ivn-rat LD50:133 mg/kg ARZNAD 14,5,64

ims-rat LD50:205 mg/kg RPTOAN 38,168,75

orl-mus LD50:2240 mg/kg 28ZEAL 5,168,76

ipr-mus LD50:111 mg/kg FAATDF 3,533,83

scu-mus LD50:183 mg/kg RPTOAN 38,168,75

ivn-mus LD50:70 mg/kg ARZNAD 14,870,64

ims-mus LD50:172 mg/kg ARZNAD 14,870,64

SAFETY PROFILE: Poison by intraperitoneal, intravenous, intramuscular, and subcutaneous routes.Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x. See also BROMIDES.**BGS500 CAS: 27469-53-0 HR: 3
1-(4,6-BISALLYLAMINO-s-TRIAZINYL)-4-(p,p'-DIFLUOROBENZHYDRYL)-PIPERAZINE**mf: C₂₆H₂₉F₂N₇ mw: 477.62**PROP:** Solid. Mp: 175–180°.**SYNS:** ALMITRINA (SPANISH) □ 2,4-BIS(ALLYLAMINO)-6-(4-(BIS-(p-FLUOROPHENYL)METHYL)-1-PIPERAZINYL)-s-TRIAZINE**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:390 mg/kg DRFUD4 3,717,78

ivn-mus LD50:210 mg/kg DRFUD4 3,717,78

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. When heated to decomposition it emits very toxic fumes of F⁻ and NO_x. See also ALLYL COMPOUNDS.**BGS750 CAS: 5975-73-5 HR: 1
BIS(3-ALLYLOXY-2-HYDROXYPROPYL) FUMARATE**mf: C₁₆H₂₄O₈ mw: 344.40**SYN:** BIS-3-ALLOXY-2-HYDROXYPROPYL-1-ESTER KYSELINY FUMAROVE (CZECH)**TOXICITY DATA with REFERENCE:**

skn-rbt 500 mg/24H MLD 28ZPAK -,100,72

eye-rbt 100 mg/24H MOD 28ZPAK -,100,72

orl-rat LD50:9710 mg/kg 28ZPAK -,100,72

SAFETY PROFILE: Mildly toxic by ingestion. A skin and eye irritant. When heated to decomposition it emits acrid smoke and irritating fumes. See also ESTERS and ALLYL COMPOUNDS.**BGS825 CAS: 90566-09-9 HR: 2
4,5-BIS(ALLYLOXY)-2-IMIDAZOLINDINONE**mf: C₉H₁₄N₂O₃ mw: 198.25**TOXICITY DATA with REFERENCE:**

orl-mus LD50:1850 mg/kg CPBTAL 12,843,64

ipr-mus LD50:1600 mg/kg CPBTAL 12,843,64

scu-mus LD50:1650 mg/kg CPBTAL 12,843,64

SAFETY PROFILE: Moderately toxic by ingestion, subcutaneous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x. See also ALLYL COMPOUNDS.**BGT000 CAS: 28434-86-8 HR: 3
BIS(4-AMINO-3-CHLOROPHENYL) ETHER**mf: C₁₂H₁₀Cl₂N₂O mw: 269.14**SYNS:** 3,3'-DICHLOR-4,4'-DIAMINO-DIPHENYLAETHER (GERMAN) □ 3,3'-DICHLORO-4,4'-DIAMINODIPHENYL ETHER □ 4,4'-OXYBIS(2-CHLOROANILINE) □ 4,4'-OXYBIS(2-CHLORO-BENZENAMINE)**TOXICITY DATA with REFERENCE:**

mmo-sat 100 µg/plate SAIGBL 24,498,82

dns-rat:lvrl 1 µmol/L MUREAV 204,683,88

CONSENSUS REPORTS: IARC Cancer Review: Group 2B IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 16,309,78.**SAFETY PROFILE:** Suspected carcinogen with experimental carcinogenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x. See also ETHERS.**BGT125 CAS: 26493-63-0 HR: 3
BIS(2-AMINOETHYL)AMINE COBALT(III) AZIDE**mf: C₄H₁₃CoN₁₂ mw: 288.16(HN(C₂H₄NH₂)₂Co)(N₃)₃**CONSENSUS REPORTS:** Cobalt and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** A dangerous shock-sensitive explosive. Upon decomposition it emits toxic fumes of NO_x. See COBALT COMPOUNDS and AZIDES.**BGT150 CAS: 59419-71-5 HR: 3
BIS(2-AMINOETHYL)AMINEDIPEROXO-CHROMIUM(IV)**mf: C₄H₁₃CrN₃O₄ mw: 219.16HN(C₂H₄NH₂)₂Cr(O₂)₂**CONSENSUS REPORTS:** Chromium and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Decomposes explosively when heated to 110°C. Upon decomposition it emits toxic fumes of NO_x. See also CHROMIUM COMPOUNDS and PEROXIDES.**BGT250 CAS: 314-13-6 HR: 3
4,4'-BIS(1-AMINO-8-HYDROXY-2,4-DISULFO-7-NAPHTHYLAZO)-3,3'-BITOLYL, TETRASODIUM SALT**mf: C₃₄H₂₄N₆O₁₄S₄•4Na mw: 960.84**PROP:** Blue crystals with brown/green luster. Sol in H₂O, EtOH, acid, and alkalies.**SYNS:** 4,4'-BIS(7-(1-AMINO-8-HYDROXY-2,4-DISULFO)NAPHTHYL AZO)-3,3'-BITOLYL, TETRASODIUM SALT □ 4,4'-BIS(1-AMINO-8-HYDROXY-2,4-DISULPHO-7-NAPHTHYLAZO)-3,3'-BITOLYL, TETRASODIUM SALT □ BLEKIT EVANSA (POLISH) □ CHLORAZOL SKY BLUE FF □ C.I. 23860 □ C.I. DIRECT BLUE 53 □ DIAMINE SKY BLUE FF □ DIAZOBLEU □ DIAZOL PURE BLUE FF □ DYE EVANS BLUE □ EB □ EVABLIN □ EVANS BLUE DYE □ GEIGY-BLAU 536 □ T 1824**TOXICITY DATA with REFERENCE:**

mma-sat 33 µg/plate CRNGDP 3,21,82

dns-rat:lvrl 100 µmol/L MUREAV 136,255,84

dnd-mus-skn 192 µmol/kg CRNGDP 5,231,84

ivn-rat LDLo:5 g/kg ARSUAX 48,17,44

ipr-mus LDLo:200 mg/kg BHJUAV 21,492,59

ivn-dog LDLo:3 g/kg ARSUAX 48,17,44

ivn-cat LDLo:1 g/kg ARSUAX 48,17,44

ivn-rbt LDLo:1 g/kg ARSUAX 48,17,44

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 8,151,75. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by intravenous route. An experimental teratogen. Other experimental reproductive effects. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits very toxic fumes of SO_x , Na_2O , and NO_x .

BGT500 CAS: 2579-20-6 HR: 3
1,3-BIS(AMINOMETHYL)CYCLOHEXANE

SYNS: 1,3-CYCLOHEXANEBIS(METHYLAMINE) (8CI) \square CYCLOHEXANEDIMETHANAMINE (9CI) \square 1,3-DI(AMINO METHYL)CYCLOHEXANE \square KODAK SILVER HALIDE SOLVENT HS-103

TOXICITY DATA with REFERENCE:

orl-rat LD50:880 mg/kg HURC* -,73

skn-rat LDLo:100 mg/kg KODAK* -,71

ipr-rat LDLo:25 mg/kg KODAK* -,71

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by skin contact and intraperitoneal routes. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x .

BGT750 CAS: 2549-93-1 HR: 2
1,4-BIS(AMINOMETHYL)CYCLOHEXANE

mf: $\text{C}_8\text{H}_{18}\text{N}_2$ mw: 142.28

SYNS: BAMCH \square SILVER HALIDE SOLVENT (HS103)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg SEV SUNCO* 10/78

orl-rat LD50:530 mg/kg SUNCO* 10/78

skn-rbt LD50:420 mg/kg SUNCO* 10/78

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. A severe skin irritant. When heated to decomposition it emits toxic fumes of NO_x .

BGT800 CAS: 6864-37-5 HR: 2
BIS(4-AMINO-3-METHYLCYCLOHEXYL)METHANE

mf: $\text{C}_{15}\text{H}_{30}\text{N}_2$ mw: 238.47

SYNS: ANCAMINE 2049 \square BIS(3-METHYL-4-AMINOCYCLOHEXYL)METHANE \square CYCLOHEXYLAMINE, 4,4'-METHYLENE-BIS(2-METHYL- \square CYCLOHEXANAMINE, 4,4'-METHYLENE-BIS(2-METHYL- \square 3DCM \square 4,4'-DIAMINO-3,3'-DIMETHYL-DICYCLOHEXYLMETHANE \square 3,3'-DIMETHYL-4,4'-DIAMINO-DICYCLOHEXYLMETHANE \square 2,2'-DIMETHYL-4,4'-METHYLENEBIS(CYCLOHEXYLAMINE) \square EPI-CURE 113 \square HARDENER SL \square LAROMIN C \square LAROMIN C 260 \square RUTAPOX SL

TOXICITY DATA with REFERENCE:

ihl-rat LC50:420 mg/m³/4H NTIS** OTS0539620-1

SAFETY PROFILE: Moderately toxic by inhalation. When heated to decomposition it emits toxic vapors of NO_x .

BGU000 CAS: 63077-09-8 HR: 2
BIS(2-AMINO-1-NAPHTHYL)SODIUM PHOSPHATE

mf: $\text{C}_{20}\text{H}_{17}\text{N}_2\text{O}_4\text{P}\cdot\text{Na}$ mw: 403.35

SYN: 2-AMINO-1-NAPHTHOL PHOSPHATE (ESTER) SODIUM SALT

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits very toxic fumes of PO_x , NO_x , and Na_2O . See also PHOSPHATES and ESTERS.

BGU100 CAS: 25834-80-4 HR: D
2,4-BIS((4-AMINOPHENYL)METHYL)BENZEN-AMINE

mf: $\text{C}_{20}\text{H}_{21}\text{N}_3$ mw: 303.44

SYN: BENZENAMINE, 2,4-BIS((4-AMINOPHENYL)METHYL)-
TOXICITY DATA with REFERENCE:

mic-sat 33 $\mu\text{Lg}/\text{plate}$ EMMUEG 19(Suppl 21),2,1992

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x .

BGU500 CAS: 4485-25-0 HR: 3
2,2-BIS(p-AMINOPHENYL)-1,1,1-TRICHLOROETHANE

mf: $\text{C}_{14}\text{H}_{13}\text{Cl}_3\text{N}_2$ mw: 315.64

SYNS: 2,2-BIS(p-ANILINE)-1,1,1-TRICHLOROETHANE \square p,p'-DIAMINODIPHENYLTRICHLOROETHANE

TOXICITY DATA with REFERENCE:

orl-rat LDLo:1000 mg/kg JAPMA8 37,461,48

orl-mus LDLo:250 mg/kg JAPMA8 37,461,48

SAFETY PROFILE: Poison by ingestion. When heated to decomposition it emits very toxic fumes such as Cl^- and NO_x .

BGU600 CAS: 7300-34-7 HR: 3
1,4-BIS(3-AMINOPROPOXY)BUTANE

mf: $\text{C}_{12}\text{H}_{24}\text{N}_2\text{O}_2$ mw: 228.38

SYNS: 1,4-BIS(γ -AMINOPROPOXY)BUTANE \square 1,4-BUTANEDIOL BIS(3-AMINOPROPYL) ETHER \square α , ω -DIAMINO-4,9-DIOXADODECANE \square 1,12-DIAMINO-4,9-DIOXADODECANE \square 4,9-DIOXA-1,12-DIAMINODODECANE \square 4,9-DIOXADODECANE-1,12-DIAMINE \square 1-PROPANAMINE, 3,3'-(1,4-BUTANEDIYLBIS(OXY))BIS- \square PROPYLAMINE, 3,3'-(TETRAMETHYLENE DIOXY)BIS- \square 3,3'-(TETRAMETHYLENE-DIOXY)BIS(PROPYL AMINE) \square 3,3'-(TETRAMETHYLENEDI-OXY)-DI(PROPANAMINE)

TOXICITY DATA with REFERENCE:

orl-rat LD50:3450 mg/kg NTIS** OTS0539626

ihl-rat LC50:1500 mg/m³/4H NTIS** OTS0539626

skn-rat LD50:>200 mg/kg NTIS** OTS0539626

SAFETY PROFILE: A poison by skin contact. Moderately toxic by ingestion and inhalation. When heated to decomposition it emits toxic vapors of NO_x .

BGU750 CAS: 105-83-9 HR: 3
BIS(γ -AMINOPROPYL)METHYLAMINE

mf: $\text{C}_7\text{H}_{19}\text{N}_3$ mw: 145.29

PROP: Liquid, completely miscible in water. D: 0.9307 @ 20°/20°, bp: 240.6°, fp: -29.6°, flash p: 220°F.

SYNS: BIS(ω -AMINOPROPYL)METHYLAMINE □ BIS(3-AMINOPROPYL)METHYLAMINE □ N,N-BIS(γ -AMINOPROPYL)METHYLAMINE □ N,N-BIS(3-AMINOPROPYL)METHYLAMINE □ 3,7-DIAMINO-N-METHYLDIPROPYLAMINE □ METHYLBIS(3-AMINOPROPYL)AMINE

TOXICITY DATA with REFERENCE:

skn-rbt 100 μ g/24H open AIHAAP 23,95,62
eye-rbt 5 mg SEV UCDS** 2/28/67
orl-rat LD50:1540 mg/kg UCDS** 2/28/67
ihl-rat LCLo:333 ppm/1H AIHAAP 23,95,62
skn-rbt LDLo:140 mg/kg AIHAAP 23,95,62

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by inhalation and skin contact. Moderately toxic by ingestion. A skin and severe eye irritant. See also AMINES. Combustible when exposed to heat or flame. To fight fire, use foam, fog, dry chemical. When heated to decomposition it emits toxic fumes of NO_x.

BGV000 CAS: 7209-38-3 HR: 3
1,4-BIS(AMINOPROPYL)PIPERAZINE

mf: C₁₀H₂₄N₄ mw: 200.38

SYN: BIS(AMINOPROPYL)PIPERAZINE (DOT)

TOXICITY DATA with REFERENCE:

ivn-mus LD50:3500 μ g/kg CPBTAL 20,2459,72

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route. A corrosive material and a powerful irritant to skin, eyes, and mucous membranes. When heated to decomposition it emits toxic fumes of NO_x.

BGV500 CAS: 14650-81-8 HR: 2
BIS(2-AMINOTHIOPHENOL), ZINC SALT

mf: C₁₂H₁₂N₂S₂Zn mw: 313.75

PROP: White powder. Sltly sol in DMF, DMSO, Py.

SYNS: o-AMINOTHIOPHENOLAT ZINECNATY (CZECH) □ BIS(2-AMINOPHENYLTHIO)ZINC

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MOD 28ZPAK -11,72
eye-rbt 2 mg/24H SEV 28ZPAK -11,72

CONSENSUS REPORTS: Zinc and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A skin and severe eye irritant. See also ZINC COMPOUNDS. When heated to decomposition it emits very toxic fumes of ZnO, NO_x and SO_x.

BGV750 CAS: 3751-44-8 HR: 3
1,3-BIS(5-AMINO-1,3,4-TRIAZOL-2-YL)-TRIAZENE

mf: C₄H₇N₁₁ mw: 209.18

SAFETY PROFILE: Decomposes explosively when heated to its melting point (187°C). When heated to decomposition it emits toxic fumes of NO_x.

BGV800 CAS: 2616-10-1 HR: 1
BISANILINE-P

mf: C₂₄H₂₈N₂ mw: 344.50

SYNS: BENZAMINE, 4,4'-(1,4-PHENYLENEBIS(1-METHYLETHYLIDENE))BIS- □ 4,4'-(1,4-PHENYLENE-BIS(1-METHYLETHYLIDENE))BISANILINE

TOXICITY DATA with REFERENCE:

orl-rat LD50:>5000 mg/kg USXXAM #6184333

skn-rat LD50:>2000 mg/kg USXXAM #6184333

SAFETY PROFILE: Low toxicity by ingestion and skin contact. When heated to decomposition it emits toxic vapors of NO_x.

BGW000 CAS: 4193-55-9 HR: 3
4,4'-BIS((4-ANILINO-6-BIS(2-HYDROXYETHYL)AMINO-w-TRIAZIN-2-YL)AMINO)-2,2'-STILBENE DISULFONIC ACID DISODIUM SALT

mf: C₄₀H₄₀N₁₂O₁₀S₂•2Na mw: 959.02

TOXICITY DATA with REFERENCE:

eye-rbt 35 mg MOD MVCRB3 2,193,73

orl-rat LD50:14,530 mg/kg MVCRB3 2,193,73

ipr-rat LD50:350 mg/kg MVCRB3 2,193,73

scu-mus LD50:1000 mg/kg MVCRB3 2,193,73

orl-gpg LD50:250 mg/kg MVCRB3 2,193,73

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. Moderately toxic by subcutaneous route. An eye irritant. See also SULFONATES. When heated to decomposition it emits very toxic fumes of NO_x, Na₂O, and SO_x.

BGW100 CAS: 3426-43-5 HR: 3
4,4'-BIS(((4-ANILINO-6-METHOXY-s-TRIAZIN-2-YL)AMINO)-2,2'-STILBENEDISULFONIC ACID) DISODIUM SALT

mf: C₃₄H₂₈N₁₀O₈S₂•2Na mw: 814.82

SYN: DISODIUM-4,4'-BIS((4-ANILINO-6-METHOXY-s-TRIAZIN-2-YL)AMINO)STILBENE-2,2'-DISULFONATE

TOXICITY DATA with REFERENCE:

eye-rbt 100 mg MOD MVCRB3 2,193,73

ipr-rat LD50:330 mg/kg GISAAA 51(1),87,86

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal route. An eye irritant. When heated to decomposition it emits toxic fumes of SO_x and Cl⁻.

BGW325 CAS: 71439-68-4 HR: D
BISANTRENE HYDROCHLORIDE

mf: C₂₂H₂₂N₈•2ClH mw: 471.44

PROP: Orange crystals. Mp: 288–289°.

SYNS: CL 216942 □ NSC-337766

TOXICITY DATA with REFERENCE:

dnd-mus:leu 620 μ g/L CNREA8 42,2660,82

dni-mus:leu 2300 nmol/L CNREA8 42,440,82

oms-mus:leu 1 μ mol/L CNREA8 42,440,82

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x and HCl.

BGW400 CAS: 92784-30-0 HR: 3
cis-BISASCORBATO(RACEMIC-1,2-DIAMINO-CYCLOHEXANE)PLATINUM(II) HYDRATE

mf: C₁₈H₂₈N₂O₁₂Pt mw: 659.57

PROP: IDLH 4 mg/m³ (as Pt).

SYNS: PLATINUM, BIS(1-ASCORBATO-O3)(1,2-CYCLO-
HEXANEDIAMINE-N,N'), (SP-4-2)- □ DAP-1

TOXICITY DATA with REFERENCE:

ipr-mus LD50:125 mg/kg CNREA8 45,4748,1985

SAFETY PROFILE: A poison by intraperitoneal route.
When heated to decomposition it emits toxic vapors of
NO_x and Pt.

BGW500

HR: 3

BIS-*o*-AZIDO BENZOYL PEROXIDE

mf: C₁₄H₈N₆O₄ mw: 324.26

SAFETY PROFILE: It has exploded violently in
contact with metals. Upon decomposition it emits toxic
fumes of NO_x. See also PEROXIDES and AZIDES.

BGW650

CAS: 68979-48-6

HR: 3

1,2-BIS(AZIDOCARBONYL)CYCLOPROPANE

mf: C₅H₄N₆O₂ mw: 180.13



SAFETY PROFILE: Spontaneously explosive. When
heated to decomposition it emits toxic fumes of NO_x. See
also AZIDES.

BGW700

HR: 3

BIS(2-AZIDOETHOXYMETHYL)NITRAMINE

mf: C₆H₁₂N₈O₄ mw: 260.21



SAFETY PROFILE: An impact-sensitive explosive.
Upon decomposition it emits toxic fumes of NO_x. See
also AZIDES.

BGW710

CAS: 17607-20-4

HR: 3

3,3-BIS(AZIDOMETHYL)OXETANE

mf: C₅H₈N₆O mw: 168.16



SAFETY PROFILE: A sensitive explosive. Upon
decomposition it emits toxic fumes of NO_x. See also
AZIDES.

BGW720

CAS: 5284-80-0

HR: 1

1,5-BIS(*p*-AZIDOPHENYL)-1,4-PENTADIEN-3-ONE

mf: C₁₇H₁₂N₆O mw: 316.35

SYNS: 1,5-BIS-(4-AZIDOPHENYL)-1,4-PENTADIEN-3-ON □
DIAZODIBENZALACETON □ 1,4-PENTADIEN-3-ONE, 1,5-
BIS(4-AZIDOPHENYL)-(9CI)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 85JCAE -,733,86

eye-rbt 500 mg/24H MLD 85JCAE -,733,86

SAFETY PROFILE: A skin and eye irritant. When
heated to decomposition it emits acrid smoke and
irritating fumes.

BGW739

HR: 3

BIS(AZIDOTHIOCARBONYL)DISULFIDE

mf: C₂N₆S₄ mw: 236.31

SAFETY PROFILE: An explosive sensitive to
mechanical impact or heating to 40°. Slow decomposition
during storage increases the sensitivity. When heated to
decomposition it emits toxic fumes of SO_x and NO_x. See
also AZIDES and SULFIDES.

BGW750

CAS: 526-62-5

HR: 3

2,5-BIS(AZIRIDINO)BENZOQUINONE

mf: C₁₀H₁₀N₂O₂ mw: 190.22

SYNS: BAYER G4073 □ 2,5-BIS-

ATHYLENIMINOBENZOCHINON-1,4 (GERMAN) □ 2,5-BIS(1-
AZIRIDINYL)BENZOQUINONE □ 2,5-BIS-ETHYLENIMINO
BENZOQUINONE □ CHINON I (GERMAN) □ QUINON I

TOXICITY DATA with REFERENCE:

mno-sat 10 µL/plate ANYAA9 76,475,58

mma-sat 200 µg/plate SYSWAE 12,41,79

mno-esc 50 µg/disc APMBAY 6,23,58

sln-dmg-orl 50,000 ppm MUREAV 2,29,65

cyt-hmn:leu 200 µg/L/4H CHROAU 26,475,69

ipr-mus LD50:29,500 µg/kg AEPPAE 230,559,57

CONSENSUS REPORTS: EPA Genetic Toxicology
Program.

SAFETY PROFILE: Poison by intraperitoneal route.
Human mutation data reported. When heated to
decomposition it emits toxic fumes of NO_x.

BGX500

CAS: 1553-36-2

HR: 3

N,N'-BIS(AZIRIDINYLACETYL)-1,8-OCTAMETHYL ENE DIAMINE

mf: C₁₆H₃₀N₄O₂ mw: 310.50

SYN: N,N'-BIS(AZIRIDINEACETYL)-1,8-OCTAMETHYLENE-
DIAMINE

TOXICITY DATA with REFERENCE:

mno-sat 6410 mg/L MUREAV 31,115,75

cyt-rat-orl 200 µg/kg MUREAV 31,115,75

dlt-rat-orl 100 mg/kg MUREAV 31,115,75

orl-rat LD50:225 mg/kg MUREAV 31,115,75

orl-mus LD50:1070 mg/kg EXPEAM 24,924,68

ipr-mus LD50:88 mg/kg EXPEAM 24,924,68

SAFETY PROFILE: Poison by ingestion and
intraperitoneal routes. Experimental reproductive effects.
Mutation data reported. When heated to decomposition it
emits toxic fumes of NO_x.

BGX750

CAS: 24279-91-2

HR: 3

2,5-BIS(1-AZIRIDINYL)-3-(2-CARBAMOYLOXY-1-METHOXYETHYL)-6-METHYL-1,4-BENZOQUINONE

mf: C₁₅H₁₉N₃O₅ mw: 321.37

PROP: Red to reddish-brown crystals. Mp: 202°
(decomp). Sltly sol in chloroform, acetone, and abs alc.
Practically insol in water.

SYNS: 2,5-BIS(1-AZIRIDINYL)-3-(2-HYDROXY-1-METHOXY
ETHYL)-6-METHYL-*p*-BENZOQUINONE CARBAMATE (ESTER)
□ CARBAZILQUINONE □ CARBOQUONE □ ESQUINON

TOXICITY DATA with REFERENCE:

mno-sat 2500 ng/plate TAKHAA 44,96,85

mma-sat 100 µg/plate CNREA8 38,2148,78

mno-esc 2500 ng/plate TAKHAA 44,96,85

dnr-bcs 4 µg/plate TAKHAA 44,96,85

sce-ham:lng 10 µg/L CNREA8 44,3270,84

orl-rat LD50:27,300 µg/kg IYKEDH 6,119,75

ipr-rat LD50:3070 µg/kg IYKEDH 6,119,75
 scu-rat LD50:3990 µg/kg OYYAA2 8,501,74
 ivn-rat LD50:3620 µg/kg IYKEDH 6,119,75
 orl-mus LD50:28,600 µg/kg IYKEDH 6,119,75
 ipr-mus LD50:3440 µg/kg IYKEDH 6,119,75
 scu-mus LD50:4900 µg/kg OYYAA2 8,501,74
 ivn-mus LD50:5430 µg/kg OYYAA2 6,119,75

SAFETY PROFILE: A poison via ingestion, intraperitoneal, subcutaneous, and intravenous routes. Mutation data reported. When heated to decomposition it emits toxic NO_x. See also CARBAMATES.

BGX775 CAS: 302-48-7 HR: 3
P,P-BIS(1-AZIRIDINYL)-N-ETHYLPHOSPHINIC AMIDE

mf: C₆H₁₄N₃OP mw: 175.20

PROP: Solid. Mp: 57–61°, bp: 144° @ 5 mm.

SYNS: P,P-BIS(1-AZIRIDINYL)-N-ETHYLAMINOPHOSPHINE OXIDE □ ENT 50,787 □ PHOSPHINIC AMIDE, P,P-BIS(1-AZIRIDINYL)-N-ETHYL-

TOXICITY DATA with REFERENCE:

pic-esc 11,500 µmol/L HERAY 68,245,71
 mmo-ssp 70 µmol/L HERAY 68,245,71
 ipr-mus LDLo:41 mg/kg FATOAO 28,70,65

SAFETY PROFILE: Poison by intraperitoneal route. Experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x and PO_x.

BGX850 CAS: 5774-35-6 HR: D
p,p-BIS(1-AZIRIDINYL)-N-ISOPROPYLAMINO PHOSPHINE OXIDE

mf: C₇H₁₆N₃OP mw: 189.23

SYNS: p,p-BIS(1-AZIRIDINYL)-N-ISOPROPYLPHOSPHINIC AMIDE □ ENT 51256 □ PHOSPHINIC AMIDE, p,p-BIS(1-AZIRIDINYL)-N-ISOPROPYL- □ PHOSPHINIC AMIDE, p,p-BIS(1-AZIRIDINYL)-N-(1-METHYLETHYL)-(9CI)

TOXICITY DATA with REFERENCE:

pic-esc 2300 µmol/L HERAY 68,245,71
 cyt-ham:lng 33 µmol/L HERAY 68,255,71

SAFETY PROFILE: Experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x and PO_x.

BGY000 CAS: 1078-79-1 HR: 3
BIS(1-AZIRIDINYL)(2-METHYL-3-THIAZO LIDINYL)PHOSPHINE OXIDE

mf: C₈H₁₆N₃OPS mw: 233.30

SYNS: IMIPHOS □ MARCOPHANE □ MARKOFANE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:50 mg/kg 21ACAB -,129,68
 orl-mus LD50:225 mg/kg 21ACAB -,129,68
 ipr-mus LD50:142 mg/kg 21ACAB -,129,68

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of SO_x, PO_x, and NO_x.

BGY050 CAS: 4110-66-1 HR: 3
N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-BENZAMIDE

mf: C₁₁H₁₄N₃O₂P mw: 251.25

SYNS: BENZAMIDE, N-(BIS(1-AZIRIDINYL)PHOSPHINYL)- □ BENZOTEF □ BENZO-TEPA □ BENZOTEPHE □ N-BENZOYL-N',N',N"-DIETHYLENETRIAMIDE OF PHOSPHORIC ACID

TOXICITY DATA with REFERENCE:

orl-rat LD50:50 mg/kg FATOBP 5,105,1970
 scu-mus LD50:35 mg/kg FATOBP 8,73,1973
 par-mus LDLo:100 mg/kg FATOBP 7,91,1972
 ivn-rbt LD50:17500 µg/kg FATOBP 8,73,1973

SAFETY PROFILE: A poison by ingestion, subcutaneous, parenteral, and intravenous routes. When heated to decomposition it emits toxic vapors of NO_x and PO_x.

BGY056 CAS: 27807-50-7 HR: 3
N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-p-BROMO BENZAMIDE

mf: C₁₁H₁₃BrN₃O₂P mw: 330.15

SYN: BENZAMIDE, N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-p-BROMO-

TOXICITY DATA with REFERENCE:

unr-rbt LDLo:35 mg/kg PCJOAU 6,475,1972

SAFETY PROFILE: A poison by an unreported route. When heated to decomposition it emits toxic vapors of NO_x, PO_x, and Br⁻.

BGY125 CAS: 27807-69-8 HR: 3
N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-p-CHLORO BENZAMIDE

mf: C₁₁H₁₃ClN₃O₂P mw: 285.69

TOXICITY DATA with REFERENCE:

unr-rat LD50:26 mg/kg PCJOAU 16,626,82
 scu-mus LD50:50 mg/kg 85GDA2 1,263,80
 unr-rbt LDLo:20 mg/kg PCJOAU 6,475,72

SAFETY PROFILE: Poison by subcutaneous and possibly other routes. When heated to decomposition it emits toxic fumes of Cl⁻, NO_x, and PO_x.

BGY130 CAS: 4119-82-8 HR: 3
N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-m-iodo BENZAMIDE

mf: C₁₁H₁₃IN₃O₂P mw: 377.14

SYNS: A-105 □ BENZAMIDE, N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-m-iodo- □ m-iodobenzotef

TOXICITY DATA with REFERENCE:

par-mus LD50:27 mg/kg FATOBP 7,91,1972
 par-rbt LD50:30 mg/kg FATOBP 7,91,1972

SAFETY PROFILE: A poison by parenteral route. When heated to decomposition it emits toxic vapors of PO_x and I⁻.

BGY135 CAS: 4119-81-7 HR: 3
N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-o-iodo BENZAMIDE

mf: C₁₁H₁₃IN₃O₂P mw: 377.14

SYNS: BENZAMIDE, N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-o-iodo- □ o-iodobenzotef

TOXICITY DATA with REFERENCE:

par-mus LD50:80 mg/kg FATOBP 7,91,1972
 par-rbt LD50:26 mg/kg FATOBP 7,91,1972

SAFETY PROFILE: A poison by parenteral route. When heated to decomposition it emits toxic vapors of PO_x and I⁻.

BGY140 CAS: 27807-51-8 HR: 3
N-(BIS(1-AZIRIDINYL)PHOSPHINYL)-p-iodo BENZAMIDE

mf: C₁₁H₁₃IN₃O₂P mw: 377.14

SYNS: A-19 □ N-p-iodobenzoyl-N',N',N'-diethylenetriamide of phosphoric acid

TOXICITY DATA with REFERENCE:

unr-rat LD50:50 mg/kg PCJOAU 16,626,82

ivn-mus LD50:572 mg/kg IJEBa6 21,31,83

unr-rbt LDLo:35 mg/kg PCJOAU 6,475,72

SAFETY PROFILE: Poison by unspecified routes.

When heated to decomposition it emits toxic fumes of I⁻, NO_x, and PO_x.

BGY500 CAS: 2275-81-2 HR: 3
p,p-BIS(1-AZIRIDINYL)-N-PROPYLPHOSPHINIC AMIDE

mf: C₇H₁₆N₃OP mw: 189.23

SYNS: p,p-BIS(1-AZIRIDINYL)-N-PROPYLAMINOPHOSPHINE OXIDE □ ENT 51,253 □ PHOSPHINIC AMIDE, p,p-BIS(1-AZIRIDINYL)-N-PROPYL- □ PROPYLAMINO-BIS(1-AZIRIDINYL)PHOSPHINE OXIDE

TOXICITY DATA with REFERENCE:

pic-esc 2300 µmol/L HEREAY 68,245,71

mmo-ssp 70 mmol/L HEREAY 68,245,71

ipr-mus LDLo:25 mg/kg FATOAO 28,70,65

SAFETY PROFILE: Poison by intraperitoneal route.

Experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x and PO_x.

BGY700 CAS: 1271-54-1 HR: 3
BIS-BENZENE CHROMIUM

mf: C₁₂H₁₂Cr mw: 208.24

PROP: Air-sensitive brown-black crystals. Mp: 284–285°. Sol in C₆H₆; sltly sol in Et₂O. IDLH 250 mg/m³ [as Cr(II)].

SYNS: CHROMIUM, BIS(BENZENE)-(8CI) □ CHROMIUM, BIS(eta⁶-BENZENE)-(9CI) □ CHROMIUM(II), DIPHENYL- □ DIBENZENECHROMIUM □ DIPHENYLCHROMIUM

TOXICITY DATA with REFERENCE:

ivn-mus LD50:17,800 µg/kg CSLNX* NX#02380

OSHA PEL: TWA 0.5 mg(Cr)/m³

ACGIH TLV: TWA 0.5 mg(Cr)/m³; Not Classifiable as a Carcinogen

SAFETY PROFILE: Poison by intravenous route.

When heated to decomposition it emits toxic fumes of Cr.

BGY720 CAS: 12089-29-1 HR: 3
BIS(BENZENE)CHROMIUM IODIDE

mf: C₁₂H₁₂Cr•I mw: 335.14

PROP: Light-sensitive, air-stable yellow solid. Sol in H₂O and EtOH. IDLH 25 mg/m³ [as Cr(III)].

SYNS: BIS(BENZENE)CHROMIUM(1+)IODIDE □ CHROMIUM(1+), BIS(BENZENE)-, IODIDE (8CI) □ (CHROMIUM(1+), BIS(eta⁶-BENZENE)-, IODIDE (9CI) □ CHROMIUM, BIS(BENZENE)IODO- □ CHROMIUM(III),

DIPHENYL-, IODIDE □ DIBENZENECHROMIUM IODIDE □ DIPHENYLCHROMIUM(III) IODIDE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:18 mg/kg CSLNX* NX#02011

OSHA PEL: TWA 0.5 mg(Cr)/m³; Not Classifiable as a Carcinogen

ACGIH TLV: TWA 0.5 mg(Cr)/m³; Not Classifiable as a Carcinogen

SAFETY PROFILE: Poison by intravenous route.

When heated to decomposition it emits toxic fumes of Cr and I⁻.

BGY750 HR: 3
BIS-BENZENE DIAZO OXIDE

mf: C₁₂H₁₀N₄O mw: 226.24

SAFETY PROFILE: A very unstable explosive. Upon decomposition it emits toxic fumes of NO_x. See also AZIDES.

BGZ000 HR: 3
BIS(n-BENZENE)IRON(O)

mf: C₁₂H₁₂Fe mw: 212.08

SAFETY PROFILE: An explosive gas that can detonate at -40°.

BGZ100 CAS: 23491-52-3 HR: D
BISBENZIMIDE

SYNS: 2,5'-BI-1H-BENZIMIDAZOLE, 2'-(4-ETHOXYPHENYL)-5-(4-METHYL-1-PIPERAZINYL)- □ 2,5'-BIBENZIMIDAZOLE, 2'-(p-ETHOXYPHENYL)-5-(4-METHYL-1-PIPERAZINYL)- □ HO 342 □ HOE 33342 □ HOECHST 33342

TOXICITY DATA with REFERENCE:

dni-hmn-hla 300 nmol/L CRNGDP 13,2389,1992

dnd-mus-fbr 5 µmol/L CRNGDP 9,485,1988

mnt-ham-ovr 10 µmol/L MUREAV 448,35,2000

dnd-ham-lng 1 µmol/L JHCYAS 30,111,1982

dni-ham-lng 1 µmol/L JHCYAS 30,111,1982

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x.

BHA000 CAS: 63950-89-0 HR: 2
BIS(BENZOATO)DIOXOCHROMIUM TRIHYDRATE

mf: C₁₄H₁₀CrO₆•3H₂O mw: 380.30

SYN: KYSELINA CEROMSALICYLOVA (CZECH)

TOXICITY DATA with REFERENCE:

eye-rbt 100 mg/24H MOD 28ZPAK -,19,72

orl-rat LD50:4810 mg/kg 28ZPAK -,19,72

CONSENSUS REPORTS: Chromium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Mildly toxic by ingestion. An eye irritant. See also CHROMIUM COMPOUNDS. When heated to decomposition it emits acrid smoke and irritating fumes.

BHA500 CAS: 95-35-2 HR: 1
N,N'-BIS(2-BENZOTHAZOLYLTHIO-METHYLENE) UREA

mf: C₁₇H₁₄N₄OS₄ mw: 418.59

SYN: 1,3-BIS((2-BENZOTHAZOLYLTHIO)METHYL)UREA

TOXICITY DATA with REFERENCE:

skn-hmn 500 mg/48H MLD AMIHC 5,311,52

skn-rbt 500 mg MOD AMIHC 5,311,52

orl-rat LD50:6000 mg/kg AMIHC 5,311,52

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mildly toxic by ingestion. A human skin irritant. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.

BHA750 CAS: 155-04-4 HR: 3
BIS(2-BENZOTHAZOLYLTHIO)ZINC

mf: C₁₄H₈N₂S₄•Zn mw: 397.85

SYNS: 2-BENZOTHAZOLETHIOL, ZINC SALT (2:1) □ BIS(MERCAPTOBENZOTHAZOLATO)ZINC □ HERMAT Zn-MBT □ 2-MERCAPTOBENZOTHAZOLE ZINC SALT □ OXAF □ PENNAC ZT □ TISPERSE MB-58 □ USAF GY-7 □ VULKACIT ZM □ ZENITE □ ZENITE SPECIAL □ ZETAX □ ZINC-2-BENZOTHAZOLETHIOLATE □ ZINC BENZOTHAZOLYL MERCAPTIDE □ ZINC BENZOTHAZOL-2-YLTHIOLATE □ ZINC BENZOTHAZYL-2-MERCAPTIDE □ ZINC MERCAPTO-BENZO THIAZOLATE □ ZINC-2-MERCAPTOBENZO-THIAZOLE □ ZINC MERCAPTOBENZOTHAZOLE SALT □ ZMBT □ ZnMB

TOXICITY DATA with REFERENCE:

orl-rat LD50:540 mg/kg VCTDC* 12/9/76

ipr-mus LD50:200 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Zinc compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion and subcutaneous routes. Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits very toxic fumes of SO_x, NO_x, and ZnO. See also ZINC COMPOUNDS and MERCAPTANS.

BHB000 CAS: 64092-23-5 HR: 3
BIS(2-BENZOYLBENZOATO)BIS(3-(1-METHYL-2-PYRROLIDINYL)PYRIDINE) NICKEL TRIHYDRATE

mf: C₄₈H₄₆N₄NiO₆•3H₂O mw: 887.75

PROP: IDLH Ca [10 mg/m³ (as Ni)].

SYN: NICOTINE, COMPOUND, with NICKEL(II)-o-BENZOYL BENZOATE TRIHYDRATE (2:1)

TOXICITY DATA with REFERENCE:

orl-rat LDLo:150 mg/kg NCNSA6 5,22,53

ipr-rat LDLo:75 mg/kg NCNSA6 5,22,53

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. Nickel and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.1 mg(Ni)/m³

ACGIH TLV: TWA 0.1 mg(Ni)/m³; Not Classifiable as a Carcinogen

NIOSH REL: (Inorganic Nickel) TWA 0.015 mg(Ni)/m³

SAFETY PROFILE: Confirmed Human Carcinogen. Poison by ingestion and intraperitoneal routes. See also NICKEL COMPOUNDS and NICOTINE. When heated to decomposition it emits toxic fumes of NO_x.

BHB100 CAS: 94-01-9 HR: 1
1,3-BIS(BENZOYLOXY)BENZENE

mf: C₂₀H₁₄O₄ mw: 318.34

SYNS: 1,3-BENZENEDIOL, DIBENZOATE □ RESORCINOL, DIBENZOATE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:8000 mg/kg JAPMA8 46,185,57

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Slightly toxic by intraperitoneal route. When heated to decomposition it emits acrid smoke and irritating vapors.

BHB250 HR: 3
1,1-BIS(BENZOYLPEROXY)CYCLOHEXANE

mf: C₂₀H₂₀O₆ mw: 356.37

SAFETY PROFILE: Explodes violently in contact with a flame. When heated to decomposition it emits acrid smoke and fumes. See also PEROXIDES.

BHB300 CAS: 140-28-3 HR: 3
1,2-BIS(BENZYLAMINO)ETHANE

mf: C₁₆H₂₀N₂ mw: 240.38

SYNS: BENZATHINE □ BENZATIN □ DBED □ N,N'-DIBENZYL ETHYLENEDIAMINE □ ETHYLENEDIAMINE, N,N'-DIBENZYL- □ USAF DO-53

TOXICITY DATA with REFERENCE:

orl-mus LD50:388 mg/kg CNCRA6 52,579,68

ipr-mus LD50:50 mg/kg NTIS** AD277-689

par-mus LD50:80 mg/kg ANTCAO 4,633,54

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, intraperitoneal, and parenteral routes. When heated to decomposition it emits toxic vapors of NO_x.

BHB400 CAS: 22710-42-5 HR: D
cis-BIS(2,2'-BIPYRIDINE)DICHLORORHODIUM CHLORIDE

mf: C₂₀H₁₆Cl₂N₄Rh•Cl mw: 521.66

PROP: IDLH 100 mg/m³ (as Rh).

SYNS: (OC-6-22)-BIS(2,2'-BIPYRIDINE-N,N')DICHLORORHODIUM CHLORIDE □ RHODIUM(1+), BIS(2,2'-BIPYRIDINE)DICHLORO-, CHLORIDE, (Z)-

TOXICITY DATA with REFERENCE:

mic-sat 5 μmol/plate MUREAV 88,165,1981

ACGIH TLV: TWA 1 mg(Rh)/m³. Not Classifiable as a human carcinogen.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BHB500 CAS: 74037-60-8 HR: 1
(4,6-BIS(BIS(BUTOXYMETHYL)AMINO)-s-TRIAZIN-2-YLIMINO)DIMETHANOL

mf: C₂₅H₅₀N₆O₆ mw: 530.81

SYN: DIMETHYLOL-TETRAKIS-BUTOXYMETHYLMELAMIN (CZECH)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,157,72

eye-rbt 500 mg/24H MLD 28ZPAK -,157,72

SAFETY PROFILE: A skin and eye irritant. When heated to decomposition it emits toxic fumes of NO_x.

BHB750 CAS: 4420-79-5 HR: 3
2,5-BIS(BIS-(2-CHLOROETHYL)AMINOMETHYL) HYDROQUINONEmf: C₁₆H₂₄Cl₄N₂O₂ mw: 418.22**SYNS:** HYDROQUINONE MUSTARD □ NSC-18321 □ WEATHERBEE MUSTARD**TOXICITY DATA with REFERENCE:**ipr-rat LD₁₀:4700 µg/kg CNCRA6 17,1,62
ivn-dog LDLo:900 µg/kg CCSUBJ 2,201,65
ivn-mky LDLo:1800 µg/kg CCSUBJ 2,201,65**SAFETY PROFILE:** Deadly poison by intravenous and intraperitoneal routes. A powerful irritant. Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits highly toxic fumes of NO_x and Cl⁻.**BHB950 CAS: 4028-32-4 HR: 1**
4,4'-BIS((4-BIS((2-HYDROXYETHYL)AMINO)-6-CHLORO-s-TRIAZIN-2-YL)AMINO)-2,2'-STILBENEDISULFONIC ACID, DISODIUM SALTmf: C₂₈H₃₀Cl₂N₁₀O₁₀S₂•2Na mw: 847.68**TOXICITY DATA with REFERENCE:**

eye-rbt 100 mg MOD MVCRB3 2,193,73

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** An eye irritant. When heated to decomposition it emits toxic fumes of NO_x, SO₃, and Cl⁻.**BHC500 CAS: 4470-72-8 HR: 2**
4,4'-BIS((4-BIS(2-HYDROXYETHYL)AMINO)-6-METHOXY-s-TRIAZIN-2-YL)AMINO)-2,2'-STILBENEDISULFONIC ACID DISODIUM SALTmf: C₃₀H₃₆N₁₀O₁₂S₂•2Na mw: 838.86**TOXICITY DATA with REFERENCE:**

eye-rbt 100 mg SEV MVCRB3 2,193,73

SAFETY PROFILE: A severe eye irritant. See also SULFONATES. When heated to decomposition it emits very toxic fumes of NO_x, Na₂O, and SO_x.**BHC750 CAS: 12224-02-1 HR: 2**
4,4'-BIS((4-BIS((2-HYDROXYETHYL)AMINO)-6-(m-SULFOANILINO)-s-TRIAZIN-2-YL)AMINO)-2,2'-STILBENEDISULFONIC ACID TETRASODIUM SALTmf: C₄₀H₄₀N₁₂O₁₆S₄•4Na mw: 1165.12**TOXICITY DATA with REFERENCE:**

skn-rbt 500 mg/24H MLD MVCRB3 2,193,73

eye-rbt 100 mg MOD MVCRB3 2,193,73

orl-rat LD₅₀:1960 mg/kg GISAAA 51(1),87,86ipr-rat LD₅₀:1750 mg/kg MVCRB3 2,193,73orl-rat LD₅₀:1960 mg/kg GISAAA 51(1),87,86ipr-rat LD₅₀:1750 mg/kg MVCRB3 2,193,73orl-mus LD₅₀:1620 mg/kg GISAAA 51(1),87,86scu-mus LD₅₀:1500 mg/kg MVCRB3 2,193,73ivn-mus LD₅₀:900 mg/kg MVCRB3 2,193,73**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Moderately toxic by ingestion, intraperitoneal, subcutaneous, and intravenous routes. Askin and eye irritant. See also SULFONATES. When heated to decomposition it emits very toxic fumes of SO_x, Na₂O, and NO_x.**BHD000 CAS: 64036-79-9 HR: 3**
BIS(BIS(β-HYDROXYETHYL)SULFONIUM-METHYL) SULFIDE DICHLORIDEmf: C₁₂H₂₈O₄S₃•2Cl mw: 403.48**SYN:** (THIOETHYLENE)BIS(BIS(2-HYDROXYETHYL)-SULFONIUM) DICHLORIDE**TOXICITY DATA with REFERENCE:**

orl-rat LDLo:250 mg/kg NCNSA6 5,9,53

scu-mus LD₅₀:200 mg/kg NTIS** PB158-507**SAFETY PROFILE:** Poison by ingestion and subcutaneous routes. When heated to decomposition it emits very toxic fumes of SO_x and Cl⁻. See also SULFIDES.**BHD150 CAS: 20679-58-7 HR: D**
1,4-BIS(BROMOACETOXY)-2-BUTENEmf: C₈H₁₀Br₂O₄ mw: 330.00**SYNS:** ACETIC ACID, BROMO-, 2-BUTENE-1,4-DIYL ESTER □ 2-BUTENE-1,4-DIOL BIS(BROMOACETATE) □ NSC 23989 □ SLIMACIDE V 10**CONSENSUS REPORTS:** EPA FIFRA 1988 pesticide subject to registration or re-registration.**SAFETY PROFILE:** A pesticide with unreported toxicity. When heated to decomposition it emits toxic vapors of Br⁻.**BHD250 CAS: 3785-34-0 HR: 3**
1,2-BIS(BROMOACETOXY)ETHANEmf: C₆H₈Br₂O₄ mw: 303.96**SYNS:** BROMOACETIC ACID ETHYLENE ESTER □ ETHYLENE BIS(BROMOACETATE) □ ETHYLENE BROMOACETATE □ ETHYLENE GLYCOL BIS(BROMOACETATE) □ PANDUROL □ S 13**TOXICITY DATA with REFERENCE:**ipr-mus LD₅₀:39 mg/kg JNCIAM 31,297,63ivn-mus LD₅₀:56 mg/kg CSLNX* NX#03918ivn-dog LD₅₀:15 mg/kg JNCIAM 31,297,63**SAFETY PROFILE:** Poison by intraperitoneal and intravenous routes. When heated to decomposition it emits toxic fumes of Br⁻. See also BROMIDES and ESTERS.**BHD300 CAS: 2045-18-3 HR: 3**
p-(BIS(2-BROMOETHYL)AMINO)BENZOIC ACIDmf: C₁₁H₁₃Br₂NO₂ mw: 351.07**SYN:** BENZOIC ACID, p-(BIS(2-BROMOETHYL)AMINO)-**TOXICITY DATA with REFERENCE:**ipr-rat LD₅₀:98 mg/kg JMCMA 8,167,1965ipr-mus LD₅₀:88 mg/kg JMCMA 8,167,1965**SAFETY PROFILE:** A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Br⁻.**BHG000 CAS: 22953-41-9 HR: 3**
p-(BIS(2-BROMOETHYL)AMINO)PHENOL-m-(α,α,α-TRIFLUOROMETHYL)BENZOATEmf: C₁₈H₁₆Br₂F₃NO₂ mw: 495.17

TOXICITY DATA with REFERENCE:

ipr-rat LD50:3800 µg/kg JMCAR 12,491,69
 ipr-mus LD50:3900 µg/kg JMCAR 12,491,69

SAFETY PROFILE: Poison by intraperitoneal route. See also ESTERS and BROMIDES. When heated to decomposition it emits very toxic fumes of Br⁻, F⁻, and NO_x.

BHG100 CAS: 2045-19-4 HR: 3
N,N-BIS(2-BROMOETHYL)ANILINE

mf: C₁₀H₁₃Br₂N mw: 307.06

SYN: ANILINE, N,N-BIS(2-BROMOETHYL)-

TOXICITY DATA with REFERENCE:

ipr-rat LD50:12 mg/kg JMCAR 8,167,1965
 ipr-mus LD50:9519 µg/kg JMCAR 8,167,1965

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Br⁻.

BHI750 CAS: 3138-86-1 HR: 3
2,3-BIS(BROMOMETHYL)QUINOXALINE

mf: C₁₀H₈Br₂N₂ mw: 316.02

TOXICITY DATA with REFERENCE:

ivn-mus LD50:18 mg/kg CSLNX* NX#02400

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route. See also BROMIDES. When heated to decomposition it emits very toxic fumes of Br⁻ and NO_x.

BHJ000 CAS: 2050-47-7 HR: 3
BIS(p-BROMOPHENYL) ETHER

mf: C₁₂H₈Br₂O mw: 328.02

PROP: Crystals from EtOH. Mp: 58.5°, bp: 338–340°.

SYN: USAF DO-61

TOXICITY DATA with REFERENCE:

ipr-mus LD50:125 mg/kg NTS** AD277-689

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intraperitoneal route. See also ETHERS and BROMIDES. When heated to decomposition it emits toxic fumes of Br⁻.

BHJ250 CAS: 54-91-1 HR: 3
1,4-BIS(3-BROMOPROPIONYL)-PIPERAZINE

mf: C₁₀H₁₆Br₂N₂O₂ mw: 356.10

PROP: Crystals from H₂O. Mp: 106–107°.

SYNS: A 1803 □ A-8103 □ AMEDEL □ NSC-25154 □ PIPOBROMAN □ VERCYTE

TOXICITY DATA with REFERENCE:

mno-sat 1 mg/plate CNREA8 38,2148,78
 mmo-esc 400 µg/plate TAKHAA 44,96,85
 pic-esc 500 mg/L APMBAY 12,234,64
 sce-hmn:lum 1 µmol/L CTRRDO 69,505,85
 cyt-hmn:leu 1 µmol/L CNREA8 25,275,65
 orl-rat LD50:220 mg/kg IYKEDH 4,467,73
 ipr-rat LD50:140 mg/kg IYKEDH 4,467,73
 scu-rat LD50:139 mg/kg NIIRDN 6,638,82
 orl-mus LD50:382 mg/kg IYKEDH 4,467,73
 ipr-mus LD50:285 mg/kg APPHAX 37,249,80
 scu-mus LD50:353 mg/kg IYKEDH 4,467,73

SAFETY PROFILE: Poison by ingestion, subcutaneous and intraperitoneal routes. An experimental teratogen. Other experimental reproductive effects. Human mutation data reported. When heated to decomposition it emits very toxic fumes of Br⁻ and NO_x. See also BROMIDES.

BHJ500 CAS: 126-15-8 HR: 2
BISBUTENYLENETETRAHYDROFURFURAL

mf: C₁₃H₁₆O₂ mw: 204.29

PROP: Pale-yellow liquid. D: 1.120 @ 20°/20°, bp: 307°.

SYNS: AC-R-11 □ BUTADIEN-FURFURAL COPOLYMER □ 2,3,4,5-BIS(2-BUTYLENE)TETRAHYDRO-2-FURFURAL □ 2,3,4,5-BIS(Δ²-BUTENYLENE)TETRAHYDROFURFURAL □ 2,3,4,5-BIS(2-BUTENYLENE)TETRAHYDROFURFURAL □ 2,3,4,5-BIS(2-BUTYL ENE)TETRAHYDRO-2-FURALDEHYDE □ BIS-Δ²-BUTYL ENETETRAHYDROFURFURAL □ 2,3,4,5-BIS(Δ²-BUTYLENE) TETRAHYDROFURFURAL □ 2,3,4,5-DI(2-BUTENYL)TETRA HYDROFURFURAL □ ENT 17,596 □ 4A-FORMYL-1,4,4A,5A,6,9, 9A,9B-OCTAHYDRODIBENZOFURAN □ 2-FURALDEHYDE, 2,3,4,5-BIS(2-BUTENYLENE)TETRAHYDRO- □ 1,5A,6,9,9A,9B- HEXAHYDRO-4A(4H)-DIBENZOFURANCARBOXALDEHYDE □ MGK 11 □ MGK REPELLENT 11 □ PHILLIPS R-11 □ R-11

TOXICITY DATA with REFERENCE:

orl-rat LD50:2500 mg/kg MEIEDD 10,1170,83

ivn-rat LD50:2 g/kg YKYUA6 32,605,81

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. An insect repellant. When heated to decomposition it emits acrid smoke and fumes. See also ALDEHYDES.

BHJ625 CAS: 91216-69-2 HR: 2
4,5-BIS(2-BUTENYLOXY)-2-IMIDAZOLIDINONE

mf: C₁₁H₁₈N₂O₃ mw: 226.31

SYN: SRC-15

TOXICITY DATA with REFERENCE:

orl-mus LD50:1700 mg/kg CPBTAL 12,843,64

ipr-mus LD50:770 mg/kg CPBTAL 12,843,64

scu-mus LD50:1750 mg/kg CPBTAL 12,843,64

SAFETY PROFILE: Moderately toxic by ingestion, subcutaneous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x.

BHJ750 CAS: 141-18-4 HR: 2
BIS(2-BUTOXYETHYL) ADIPATE

mf: C₁₈H₃₄O₆ mw: 346.52

SYNS: ADIPIC ACID, DIBUTOXYETHYL ESTER □ BUTYL “CELLOSOLVE” ADIPATE □ DIBUTOXYETHYL ADIPATE □ DI(2-BUTOXYETHYL) ADIPATE □ DIBUTYL CELLOSOLVE ADIPATE □ HEXANEDIOIC ACID, BIS(2-BUTOXYETHYL) ESTER

TOXICITY DATA with REFERENCE:

ipr-rat LD50:600 mg/kg 14CYAT 2,1882,63

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by intraperitoneal route. See also ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BHK000 CAS: 117-83-9 HR: 1

BIS(2-BUTOXYETHYL)PHTHALATEmf: C₂₀H₃₀O₆ mw: 366.50

SYNS: 2-BUTOXYETHANOL PHTHALATE (2:1) □ β-BUTOXYETHYL PHTHALATE □ BUTYL "CELLOSOLVE" PHTHALATE □ BUTYL GLYCOL PHTHALATE □ DI(BUTOXYETHYL)PHTHALATE □ DIBUTYL CELLOSOLVE PHTHALATE □ DIBUTYLGLYCOL PHTHALATE □ KESSCOFLEX □ KRONISOL

TOXICITY DATA with REFERENCE:

orl-rat LD50:8380 mg/kg JIHTAB 30,63,48

orl-gpg LDLo:6000 mg/kg 29ZWAE -,336,68

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mildly toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating fumes. See also ESTERS.

BHK250 CAS: 15546-16-4 HR: 3
BIS(BUTOXYMALEOXYLOXY)DIBUTYL STANNANE

mf: C₂₄H₄₀O₈Sn mw: 575.33

SYNS: DI-N-BUTYL TIN DI(MONOBUTYL)MALEATE □ DI-N-BUTYL-ZINN-DI(MONOBUTYL)MALEINAT (GERMAN)

TOXICITY DATA with REFERENCE:

orl-rat LD50:120 mg/kg ARZNAD 19,934,69

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)**ACGIH TLV:** TWA 0.1 mg(Sn)/m³; STEL 0.2mg(Sn)/m³ (skin).**NIOSH REL:** (Organotin Compounds) TWA 0.1mg(Sn)/m³

SAFETY PROFILE: Poison by ingestion. See also TIN COMPOUNDS. When heated to decomposition it emits acrid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

BHK500 CAS: 29575-02-8 HR: 2
BIS(BUTOXYMALEOXYLOXY)DIOCTYL STANNANE

mf: C₃₂H₅₆O₈Sn mw: 687.57

SYNS: DI-N-OCTYL TIN BIS(BUTYL MALEATE) □ DI-N-OCTYL TIN DIMONOBUTYLMALEATE □ DI-N-OCTYLZINN-DIMONOBUTYLMALEINAT (GERMAN)

TOXICITY DATA with REFERENCE:

orl-rat LD50:2030 mg/kg ARZNAD 19,934,69

orl-mus LD50:3750 mg/kg FCTXAV 8,655,70

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)**ACGIH TLV:** TWA 0.1 mg(Sn)/m³; STEL 0.2mg(Sn)/m³ (skin).**NIOSH REL:** (Organotin Compounds) TWA 0.1mg(Sn)/m³

SAFETY PROFILE: Moderately toxic by ingestion. See also TIN COMPOUNDS. When heated to decomposition it emits acrid smoke and irritating fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

BHK600 CAS: 7128-64-5 HR: 1
2,5-BIS(5-tert-BUTYLBENZOXAZOL-2-YL) THIOPHENE

mf: C₂₆H₂₆N₂O₂S mw: 430.60

SYNS: BBOT □ BBOT 150 □ BENZOXAZOLE, 2,2'-(2,5-THIOPHENEDIYL)BIS(5-tert-BUTYL- □ BENZOXAZOLE, 2,2'-(2,5-THIOPHENEDIYL)BIS(5-(1,1-DIMETHYLETHYL)- □ UVITEX OB

TOXICITY DATA with REFERENCE:

orl-rat LD50:>10 g/kg MVCRB3 2,193,1973

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x.

BHK750 CAS: 143-29-3 HR: 2
BIS(BUTYLCARBITOL)FORMAL

mf: C₁₇H₃₆O₆ mw: 336.53

SYNS: BUTYLCARBITOL FORMAL □ CRYOFLEX □ DIBUTYLCARBITOL FORMAL □ 5,8,11,13,16,19-HEXA OXATRICOSANE (9CI) □ TP 90B

TOXICITY DATA with REFERENCE:

orl-rat LD50:1746 mg/kg NPIRI* 2,238,75

orl-mus LD50:2700 mg/kg GISAAA 46(5),87,81

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating fumes.

BHL000 CAS: 63979-95-3 HR: 2
BIS(4-tert-BUTYL-m-CRESYL)SULFIDE

SYN: DI-(4-tert-BUTYL-m-CRESOL)SULFIDE**TOXICITY DATA with REFERENCE:**

skn-hmn 125 mg/48H MOD AMIHBC 5,311,52

skn-rbt 500 mg SEV AMIHBC 5,311,52

ipr-rat LD50:5000 mg/kg AMIHBC 5,311,52

SAFETY PROFILE: Mildly toxic by intraperitoneal route. A moderate human skin irritant; a severe experimental skin irritant. See also SULFIDES. When heated to decomposition it emits toxic fumes of SO_x.

BHL100 CAS: 25155-25-3 HR: 1
α-α'-BIS(tert-BUTYLPEROXY)DIISOPROPYL BENZENE

mf: C₂₀H₃₄O₄ mw: 338.54

SYNS: PEROXIDE, (PHENYLENEBIS(1-METHYLETHYLIDENE)) BIS(1,1-DIMETHYLETHYL)- □ PEROXIDE, (PHENYLENEDIISO PROPYLIDENE)BIS(tert-BUTYL)- □ (PHENYLENEDIISOPROPYL IDENE)BIS(tert-BUTYLPEROXIDE) □ VUL-CUP □ VUL-CUP 40KE □ VUL-CUP R

TOXICITY DATA with REFERENCE:

skn-rbt 100%/24H MLD HERBU* PRC-304

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A skin irritant. When heated to decomposition it emits acrid smoke and irritating fumes.

BHL500 CAS: 1000-40-4 HR: 3
BIS(BUTYLTHIO)DIMETHYLTIN

mf: C₁₀H₂₄S₂Sn mw: 327.15

SYN: BIS(BUTYLTHIO)DIMETHYL STANNANE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:320 mg/kg CSLNX* NX#01865

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)ACGIH TLV: TWA 0.1 mg(Sn)/m³; STEL 0.2 mg(Sn)/m³ (skin).NIOSH REL: (Organotin Compounds) TWA 0.1 mg(Sn)/m³**SAFETY PROFILE:** Poison by intravenous route. See also TIN COMPOUNDS. When heated to decomposition it emits toxic fumes of SO_x.**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: Organotin Compounds 5504.**BHL750 CAS: 15263-52-2 HR: 3
1,3-BIS(CARBAMOYLTHIO)-2-(N,N-DIMETHYLAMINO)PROPANE
HYDROCHLORIDE**mf: C₇H₁₅N₃O₂S₂·ClH mw: 273.83

SYNS: CALDAN □ CARBAMOTHIOIC ACID-S,S'-(2-(DIMETHYLAMINO)-1,3-PROPANEDIYL) ESTER, MONOHYDROCHLORIDE (9CI) □ CARTAP HYDROCHLORIDE □ S,S'-(2-(DIMETHYLAMINO)TRIMETHYLENE)BIS(THIO CARBAMATE) HYDROCHLORIDE □ NTD 2 □ PADAN □ PATAP □ SANVEX □ THIOBEL □ THIOCARBAMIC ACID-S,S-(2-(DIMETHYLAMINO) TRIMETHYLENE)ESTER HYDROCHLORIDE □ TI-1258 □ VEGETOX

TOXICITY DATA with REFERENCE:

orl-rat LD50:250 mg/kg SPEADM 78-1,61,78

orl-mus LD50:165 mg/kg SPEADM 78-1,61,78

ivn-mus LD50:59 mg/kg JJPAZ 17,491,67

CONSENSUS REPORTS: EPA Genetic Toxicology Program.**SAFETY PROFILE:** Poison by ingestion and intravenous routes. An experimental teratogen. An insecticide. When heated to decomposition it emits very toxic fumes of NO_x, SO_x, and HCl. See also CARBAMATES.**BHL800 CAS: 58705-49-0 HR: 3
2,3-BIS(CARBOMETHOXYMERCAPTO)-
QUINOXALINE**mf: C₁₂H₁₀N₂O₄S₂ mw: 310.36

SYNS: A13-25722 □ CARBONIC ACID, DITHIODI-, o,o'-DIMETHYL S,S'-(2,3-QUINOXALINEDIYL) ESTER □ CARBONOTHIOIC ACID, S,S'-2,3-QUINOXALINEDIYL o,o'-DIMETHYL ESTER □ CARBONIC ACID, THIO-, o,o'-DIMETHYL S,S'-2,3-QUINOXALINEDIYL ESTER □ CARBONIC ACID, THIO-, o-METHYL ESTER, S,S-DIESTER WITH 2,3-QUINOXALINE-DITHIOL □ o,o'-DIMETHYL S,S'-2,3-QUINOXALINEDIYL THIO CARBONATE □ SAS 2185

TOXICITY DATA with REFERENCE:

ivn-mus LD50:180 mg/kg CSLNX* NX#01546

SAFETY PROFILE: A poison by intravenous route. When heated to decomposition it emits toxic vapors of NO_x and SO_x.**BHM000 CAS: 111-17-1 HR: 3
BIS(2-CARBOXYETHYL) SULFIDE**mf: C₆H₁₀O₄S mw: 178.22**PROP:** Very sol in alc, hot water, acetate; sltly sol in water. Mp: 134°.

SYNS: DIETHYL SULFIDE-2,2'-DICARBOXYLIC ACID □ KYSELINA-β,β'-THIODIPROPIONOVA (CZECH) □ TDPA □ 2-(2,3,5,6-TETRAMETHYLPHENOXY)PROPIONIC ACID □ 4-THIAHEPTANEDIOIC ACID □ THIODIPROPIONIC ACID □ β,β'-THIODIPROPIONIC ACID □ 3,3'-THIODIPROPIONIC ACID □ TYOX A

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,171,72

eye-rbt 20 mg/24H MOD 28ZPAK -,171,72

orl-rat LD50:3980 mg/kg 28ZPAK -,171,72

ipr-rat LD50:500 mg/kg AFREAW 3,197,51

orl-mus LD50:2000 mg/kg AFREAW 3,197,51

ipr-mus LD50:250 mg/kg AFREAW 3,197,51

ivn-mus LD50:175 mg/kg AFREAW 3,197,51

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** A poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion. A skin and eye irritant. When heated to decomposition it emits toxic fumes of SO_x. See also SULFIDES.**BHM250 CAS: 95-99-8 HR: 3
N,N'-BIS(CARBOXYMETHYL)DITHIOOXAMIDE**mf: C₆H₈N₂O₄S₂ mw: 236.28

SYN: USAF MK-3

TOXICITY DATA with REFERENCE:

ipr-mus LD50:200 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.**BHM300 CAS: 119-80-2 HR: 3
BIS(2-CARBOXYPHENYL) DISULFIDE**mf: C₁₄H₁₀O₄S₂ mw: 306.36

SYNS: BENZOIC ACID, 2,2'-DITHIOBIS-(9CI) □ BENZOIC ACID, 2,2'-DITHIODI- □ BIS(o-CARBOXYPHENYL) DISULFIDE □ 2,2'-DITHIOBIS(BENZOIC ACID) □ 2,2'-DITHIODIBENZOESAEURE □ 2,2'-DITHIODIBENZOIC ACID

TOXICITY DATA with REFERENCE:

ipr-mus LD50:367 mg/kg ARZNAD 21,284,71

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of SO_x.**BHM500 HR: 3
BIS(3-CARBOXYPROPIONYL)PEROXIDE**mf: C₈H₁₀O₈ mw: 234.16**SAFETY PROFILE:** Explodes on contact with flame. Commercial grade (dry 95%) is highly hazardous. When heated to decomposition it emits acrid smoke and fumes. See also PEROXIDES, ORGANIC.**BHM750 CAS: 94-17-7 HR: 2
BIS(p-CHLOROBENZOYL) PEROXIDE**mf: C₁₄H₈Cl₂O₄ mw: 311.12

PROP: A white, granular material. Insol in water; sol in org solvs.

SYNS: CADPX PS □ p-CHLOROBENZOYL PEROXIDE (DOT) □ p,p'-DICHLOROBENZOYL PEROXIDE □ DI-(4-CHLOROBENZOYL) PEROXIDE

TOXICITY DATA with REFERENCE:

ipr-mus LDLo:500 mg/kg CBCCT* 4,110,52

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by intraperitoneal route. Probably an irritant to skin and mucous membranes. Dangerous fire hazard; a powerful oxidizer. Store in a cool place away from fire hazards, sparks, open flames, and out of the direct rays of the sun. Dangerous explosion hazard; this material may explode by heat (over 38°) or contamination. Any contaminant that acts as an accelerator to the polymerization or decomposition of this material can cause an explosion. Heat or contact with certain fumes or mists can cause it to explode. To fight small fires, use CO₂ or foam extinguishers. Water spray or mist may also be used. Dry chemical is effective. When heated to decomposition it emits toxic fumes of Cl⁻. See also PEROXIDES, ORGANIC.

BHN000 CAS: 366-93-8 HR: 3
trans-N,N'-BIS(2-CHLOROBENZYL)-1,4-CYCLO
HEXANEBIS(METHYLAMINE) DIHYDRO
CHLORIDE

mf: C₂₂H₂₈Cl₂N₂•2ClH mw: 464.34

SYNS: AY 9944 □ trans-1,4-BIS(2-DICHLOROBENZYLAMINOETHYL)CYCLOHEXANE DICHLORHYDRATE (FRENCH) □ trans-N,N'-(1,4-CYCLOHEXYLENE DIMETHYLENE)BIS(2-CHLOROBENZYLAMINE) DIHYDRO CHLORIDE

TOXICITY DATA with REFERENCE:

orl-mus LD50:155 mg/kg PSEBAA 139,100,72

SAFETY PROFILE: Poison by ingestion.

Experimental teratogenic and reproductive effects. Inhibits cholesterol synthesis. When heated to decomposition it emits very toxic fumes of NO_x and Cl⁻.

BHN250 CAS: 50570-59-7 HR: 2
4,4'-BIS(4-CHLORO-6-BIS(2-HYDROXYETHYL
AMINO))-s-TRIAZIN-2-YL-AMINO-2,2'-
STILBENE DISULFONIC ACID

mf: C₂₈H₃₂Cl₂N₁₀O₁₀S₂ mw: 803.72

SYN: RYLUX BSP (CZECH)

TOXICITY DATA with REFERENCE:

eye-rbt 500 mg/24H SEV 28ZPAK -,251,72

SAFETY PROFILE: A severe eye irritant. See also SULFONATES. When heated to decomposition it emits very toxic fumes of Cl⁻, NO_x, and SO_x.

BHN300 CAS: 19945-22-3 HR: 3
N,N-BIS(2-CHLOROETHYL)ACETAMIDE

mf: C₆H₁₁Cl₂NO mw: 184.08

SYNS: ACETAMIDE, N,N-BIS(2-CHLOROETHYL)- □ N,N-BIS(β-CHLOROETHYL)ACETAMIDE

TOXICITY DATA with REFERENCE:

ihl-mus LC :>500 mg/m³/10M NTIS** PB158-508

SAFETY PROFILE: A poison by inhalation. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BHN500 CAS: 3374-04-7 HR: 3
N,N-BIS(β-CHLOROETHYL)-di-ALANINE
HYDROCHLORIDE

mf: C₇H₁₃Cl₂NO₂•ClH mw: 250.57

SYNS: ALANINE MUSTARD □ NSC-17663

TOXICITY DATA with REFERENCE:

ice-rat LD50:225 µg/kg JPPMAB 18,760,66

unk-man TDLo:900 µg/kg:UNS CCROBU 50,219,66

ivn-dog LDLo:1 mg/kg CCSUBJ 2,201,65

ivn-mky LDLo:1 mg/kg CCSUBJ 2,201,65

SAFETY PROFILE: Deadly poison by intracerebral and intravenous routes. Human systemic effects by an unspecified route: bone marrow changes. When heated to decomposition it emits very toxic fumes of Cl⁻, NO_x and HCl.

BHN750 CAS: 334-22-5 HR: 3
BIS-β-CHLOROETHYLAMINE

mf: C₄H₉Cl₂N mw: 142.04

SYNS: N,N-BIS-(β-CHLORAEETHYL)-AMIN (GERMAN) □ NH-LOST □ NOR-NITROGEN MUSTARD □ NSC-10873

TOXICITY DATA with REFERENCE:

mno-sat 100 µmol/L CNREA8 41,2967,81

cyt-hmn:lym 1 mg/L CRNGDP 5,1637,84

ipr-rat LD50:97 mg/kg JMCAR 8,167,65

ivn-rat LD50:100 mg/kg ARZNAD 24,1149,74

scu-mus LD50:20 mg/kg JPETAB 91,224,47

ivn-dog LDLo:6 mg/kg CCSUBJ 2,201,65

ivn-mky LDLo:11 mg/kg CCSUBJ 2,201,65

SAFETY PROFILE: Poison by intraperitoneal, subcutaneous, and intravenous routes. Experimental reproductive effects. Human mutation data reported. When heated to decomposition it emits very toxic NO_x and Cl⁻.

BHO000 HR: 3
BIS(2-CHLOROETHYL)AMINE

mf: C₂H₅Cl₂N mw: 113.95

SAFETY PROFILE: Can explode violently during evaporation of an ethereal solution at 260 mbar from a bath at 80–90°. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x. See also CHLORIDES and AMINES.

BHO250 CAS: 821-48-7 HR: 3
BIS(2-CHLOROETHYL)AMINE
HYDROCHLORIDE

mf: C₄H₉Cl₂N•ClH mw: 178.50

SYNS: BIS(β-CHLOROETHYL)AMINE HYDROCHLORIDE □ N,N-BIS(2-CHLOROETHYL)AMINE HYDROCHLORIDE □ BIS(2-CHLOROETHYL)AMMONIUM CHLORIDE □ 2-CHLORO-N-(2-CHLOROETHYL)ETHANAMINE HYDROCHLORIDE □ β,β'-DICHLORODIETHYLAMINE HYDROCHLORIDE □ 2,2'-DICHLORODIETHYLAMINE HYDROCHLORIDE □ DI-2-CHLOROETHYLAMINE HYDROCHLORIDE □ LEO 72a □ NC 26 □ NOR-HN2 □ NOR-HN2 HYDROCHLORIDE □ NOR-LOST

HYDROCHLORID (GERMAN) □ NORNITROGEN MUSTARD

HYDROCHLORIDE □ NSC-10873 □ SK 555 □ TL 161

TOXICITY DATA with REFERENCE:

hmn-lym 1 mg/L CRNGDP 5,163,84

hmn-lym 250 µg/L CRNGDP 5,163,84

mmo-sat 50 µg/plate PNASA6 72,979,75

ipr-rat LD50:100 mg/kg ARZNAD 11,143,61

ims-rat LD50:160 mg/kg ZKKOBW 84,227,75

ihl-mus LCLo:1000 mg/m³/10M NDRC** NDCrc-132,July,42

scu-mus LD50:20 mg/kg JPETAB 91,224,47

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.**SAFETY PROFILE:** A poison by inhalation, intraperitoneal, intramuscular, and subcutaneous routes. An experimental teratogen. Human mutation data reported. When heated to decomposition it emits toxic fumes of NH₃, NO_x, and Cl⁻.**BHO500 CAS: 1215-16-3 HR: 3
4'-(BIS(2-CHLOROETHYL)AMINO)ACETANILIDE**mf: C₁₂H₁₆Cl₂N₂O mw: 275.20**SYNS:** p-ACETYLAMINOPHENYL DERIVATIVE of NITROGEN MUSTARD □ LONIN 3**TOXICITY DATA with REFERENCE:**

mmo-sat 1 µmol/plate MUREAV 224,95,89

mmo-smc 808 µmol/L MUREAV 224,95,89

ipr-rat LD50:28 mg/kg JMCMAR 8,167,65

ipr-mus LD50:27 mg/kg JMCMAR 8,167,65

SAFETY PROFILE: Poison via intraperitoneal route. An experimental teratogen. Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BHP125 CAS: 1141-37-3 HR: 3
4-(BIS(2-CHLOROETHYL)AMINO)BENZOIC ACID**mf: C₁₁H₁₃Cl₂NO₂ mw: 262.15**SYN:** p-(BIS(2-CHLOROETHYL)AMINO)BENZOIC ACID**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:96 mg/kg JMCMAR 8,167,65

unr-rat LD50:63 mg/kg NEOLA4 27,261,80

ipr-mus LD50:87 mg/kg JMCMAR 8,167,65

SAFETY PROFILE: Poison by intraperitoneal and possibly other routes. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x.**BHP150 CAS: 24813-03-4 HR: 3
1-((BIS(2-CHLOROETHYL)AMINO)BENZOYL)-PIPERIDINE**mf: C₁₆H₂₂Cl₂N₂O mw: 329.30**SYNS:** KETONE, m-(BIS(2-CHLOROETHYL)AMINO)PHENYL PIPERIDINO □ PIPERIDINE, 1-(m-(BIS(2-CHLOROETHYL)AMINO)BENZOYL)-**TOXICITY DATA with REFERENCE:**

unr-rat LD50:134 mg/kg NEOLA4 27,271,80

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** A poison by an unspecified route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.**BHP250 CAS: 4213-30-3 HR: 3
p-(BIS-(β-CHLOROETHYL)AMINO)BENZYLID-
ENE MALONONITRILE**mf: C₁₄H₁₃Cl₂N₃ mw: 294.20**SYN:** NSC-48841**TOXICITY DATA with REFERENCE:**

ivn-dog LDLo:10 mg/kg CCSUBJ 2,201,65

ivn-mky LDLo:20 mg/kg CCSUBJ 2,201,65

CONSENSUS REPORTS: Cyanide and its compounds are on the Community Right-To-Know List.
SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits very toxic fumes of Cl⁻, CN⁻, and NO_x. See also NITRILES.**BHP500 CAS: 63978-55-2 HR: 3
2-(BIS(2-CHLOROETHYL)AMINO)ETHYL VINYL
SULFONE**mf: C₈H₁₅Cl₂NO₂S mw: 260.20**SYN:** VINYL(β-BIS(β-CHLOROETHYL)AMINO)ETHYL SULFONE**TOXICITY DATA with REFERENCE:**

scu-mus LD50:9 mg/kg JPETAB 93,1,48

ivn-rbt LD50:2550 µg/kg JPETAB 93,1,48

SAFETY PROFILE: Poison by subcutaneous and intravenous routes. See also SULFONATES. When heated to decomposition it emits very toxic fumes of Cl⁻, NO_x, and SO_x.**BHP750 CAS: 1492-93-9 HR: 3
4'-(BIS(2-CHLOROETHYL)AMINO)-2-FLUORO
ACETANILIDE**mf: C₁₂H₁₃Cl₂FN₂O mw: 293.19**SYN:** p-FLUOROACETYLAMINOPHENYL DERIVATIVE of NITROGEN MUSTARD**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:7916 µg/kg JMCMAR 8,167,65

ipr-mus LD50:34 mg/kg JMCMAR 8,167,65

SAFETY PROFILE: Poison by intraperitoneal route. An experimental teratogen. When heated to decomposition it emits very toxic fumes of Cl⁻, F⁻, and NO_x.**BHQ000 CAS: 20982-36-9 HR: 3
2-(BIS(2-CHLOROETHYL)AMINO)HEXAHYDRO-
1,3,2-DIAZAPHOSPHORINE- 2-OXIDE**mf: C₇H₁₆Cl₂N₃OP mw: 260.13**SYNS:** N,N-BIS-(β-CHLOROETHYL)-N',N"-PROPYLENE PHOSPHORICACIDTRIAMIDE □ CYCLIC N,N'-TRIMETHYLENE-N"-BIS(2-CHLOROETHYL)-PHOSPHORIC TRIAMIDE**TOXICITY DATA with REFERENCE:**

sln-dmg-ori 10 mmol/L DRISAA 41,102,66

ipr-rat LD50:75 mg/kg ARZNAD 11,143,61

SAFETY PROFILE: Poison by intraperitoneal route. Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x and Cl⁻.**BHQ250 CAS: 66902-62-3 HR: 3
3-(4-(BIS(2-CHLOROETHYL)AMINO)-3-
METHOXYPHENYL)ALANINE**mf: C₁₄H₂₀Cl₂N₂O₃ mw: 335.26

SYN: p-BIS(2-CHLOROETHYL)AMINO-o-METHOXYPHENYL-ALANINE

TOXICITY DATA with REFERENCE:

orl-hmn TDLo:10 mg/kg/20D-I:GIT XHPAW 441,185,74

ipr-mus LD50:39 mg/kg SSINAV 13,789,64

SAFETY PROFILE: Poison by intraperitoneal route. Human gastrointestinal effects by ingestion. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHQ300 CAS: 3689-77-8 HR: 3
2-(BIS(β-CHLOROETHYL)AMINOMETHYL)-BENZIMIDAZOLE

mf: C₁₄H₁₅Cl₂N₃ mw: 296.22

SYNS: BENZIMIDAZOLE, 2-(BIS-(2-CHLOROETHYL)AMINOMETHYL)- □ DIMEZOL 14 □ NSC-23891

TOXICITY DATA with REFERENCE:

ipr-rat LD10:5 mg/kg CNCRA6 17,63,62

ipr-mus LD10:9900 µg/kg CNCRA6 17,56,62

ivn-dog LDLo:2500 µg/kg CCSUBJ 2,201,65

ivn-mky LDLo:1250 µg/kg CCSUBJ 2,201,65

SAFETY PROFILE: A poison by intraperitoneal and intravenous routes. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BHQ750 CAS: 7751-31-7 HR: 3
3-(BIS(2-CHLOROETHYL)AMINOMETHYL)-2-BENZOXAZOLINONE

mf: C₁₂H₁₄Cl₂N₂O₂ mw: 289.18

SYN: 3-(BIS-(2-CHLORAEETHYL)AMINOMETHYL)BENZOXAZOLON-(2) (GERMAN)

TOXICITY DATA with REFERENCE:

ims-rat LD50:8 mg/kg ZKKOBW 84,227,75

ipr-mus LD50:42 mg/kg ZKKOBW 84,227,75

SAFETY PROFILE: Poison by intramuscular and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHQ760 CAS: 21447-86-9 HR: 3
1-(3-(BIS(2-CHLOROETHYL)AMINO-4-METHYL BENZOYL)AZIRIDINE)

mf: C₁₄H₁₈Cl₂N₂O mw: 301.24

SYNS: AZIRIDINE, 1-(3-(BIS(2-CHLOROETHYL)AMINO-p-TOLUOYL))- □ KETONE, 1-AZIRIDINYL 3-(BIS(2-CHLOROETHYL)AMINO)-p-TOLYL

TOXICITY DATA with REFERENCE:

unr-rat LD50:17 mg/kg NEOLA4 27,271,80

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: A poison by an unspecified route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BHR400 CAS: 21447-39-2 HR: 3
1-(3-(BIS(2-CHLOROETHYL)AMINO)-4-METHYL BENZOYL)MORPHOLINE

mf: C₁₆H₂₂Cl₂N₂O₂ mw: 345.30

SYNS: KETONE, 3-(BIS(2-CHLOROETHYL)AMINO)-p-TOLYL MORPHOLINO- □ MORPHOLINE, 4-(3-(BIS(2-CHLOROETHYL)AMINO)-p-TOLUOYL)-

TOXICITY DATA with REFERENCE:

unr-rat LD50:17 mg/kg NEOLA4 27,271,80

DOT CLASSIFICATION: 3; Label: Flammable Liquid

SAFETY PROFILE: A poison by an unspecified route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BHR500 CAS: 10070-95-8 HR: 3
4-(BIS(2-CHLOROETHYL)AMINOMETHYL)-2,3-DIMETHYL-1-PHENYL-3-PYRAZOLIN-5-ONE HYDROCHLORIDE

mf: C₁₆H₂₁Cl₂N₃O•ClH mw: 378.76

SYN: 4-(BIS-(2-CHLORAEETHYL)AMINOMETHYL)-1-PHENYL-2,3-DIMETHYLPYRAZOLON HYDROCHLORID (GERMAN)

TOXICITY DATA with REFERENCE:

ims-rat LD50:30 mg/kg ZKKOBW 84,227,75

ipr-mus LD50:580 mg/kg ARZNAD 16,634,66

SAFETY PROFILE: Poison by intramuscular route. Moderately toxic by intraperitoneal route. When heated to decomposition it emits very toxic fumes of HCl and NO_x.

BHR750 CAS: 2089-46-5 HR: 3
4-(BIS(2-CHLOROETHYL)AMINO)PHENOL

mf: C₂₇H₃₈N₂O•2BrH mw: 568.51

SYNS: 2,6-BIS(1-PIPERIDYLMETHYL)-4-(α,α-DIMETHYL BENZYL)PHENOL DIHYDROBROMIDE □ 4-α,α-DIMETHYL BENZYL-α,α'-DIPERIDINO-2,6-XYLENOL DIHYDRO-BROMIDE □ 4-(1-METHYL-1-PHENYLETHYL)-2,6-BIS-(1-PIPERIDINYL METHYL)PHENOL DIHYDROBROMIDE □ RO 2-5803 □ RYTHMOL

TOXICITY DATA with REFERENCE:

ipr-rat LD50:17 mg/kg JMCMA 8,167,65

orl-mus LD50:330 mg/kg AIPTAK 132,295,61

ipr-mus LD50:15 mg/kg JMCMA 8,167,65

ivn-mus LD50:30 mg/kg AIPTAK 132,295,61

ims-gpg LD50:48,720 µg/kg ARPMAS 313,142,80

SAFETY PROFILE: Poison by ingestion, intravenous, intramuscular and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of NO_x and HBr.

BHS250 CAS: 66232-25-5 HR: 3
2-(N,N-BIS(2-CHLOROETHYL)AMINOPHENYL) ACETIC ACID BUTYL ESTER

mf: C₁₆H₂₃Cl₂NO₂ mw: 332.1

TOXICITY DATA with REFERENCE:

orl-rat LD50:20 mg/kg PCJOAU 12,205,78

orl-mus LD50:15 mg/kg PCJOAU 12,205,78

SAFETY PROFILE: Poison by ingestion. See also ESTERS. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHS500 CAS: 66276-87-7 HR: 3
2-(N,N-BIS(2-CHLOROETHYL)AMINOPHENYL) ACETIC ACID DECYL ESTER

mf: C₂₂H₃₅Cl₂NO₂ mw: 416.2

TOXICITY DATA with REFERENCE:

orl-rat LD50:150 mg/kg PCJOAU 12,205,78

orl-mus LD50:50 mg/kg PCJOAU 12,205,78

SAFETY PROFILE: Poison by ingestion. See also ESTERS. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHS750 CAS: 66232-30-2 HR: 3
2-(N,N-BIS(2-CHLOROETHYL)AMINOPHENYL)
ACETIC ACID OCTADECYL ESTER

mf: $C_{30}H_{51}Cl_2NO_2$ mw: 529.2

TOXICITY DATA with REFERENCE:

orl-rat LD50:200 mg/kg PCJOAU 12,205,78

orl-mus LD50:140 mg/kg PCJOAU 12,205,78

SAFETY PROFILE: Poison by ingestion. See also ESTERS. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BHT000 CAS: 66232-28-8 HR: 3
2-(N,N-BIS(2-CHLOROETHYL)AMINOPHENYL)
ACETIC ACID TETRADECYL ESTER

mf: $C_{26}H_{43}Cl_2NO_2$ mw: 472.2

TOXICITY DATA with REFERENCE:

cyt-rat:oth 150 mg/L/24H-C TXAPA9 22,355,72

orl-rat LD50:46 mg/kg PCJOAU 12,205,78

orl-mus LD50:10 mg/kg PCJOAU 12,205,78

SAFETY PROFILE: Poison by ingestion. Mutation data reported. See also ESTERS. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BHT250 CAS: 342-95-0 HR: 3
3-(o-(BIS(β-CHLOROETHYL)AMINO)PHENYL)-
di-ALANINE

mf: $C_{13}H_{18}Cl_2N_2O_2$ mw: 305.23

SYNS: CB 1729 □ o-DI-2-CHLOROETHYLAMINO-di-PHENYLALANINE □ FDA 0109 □ MEROPHAN □ o-MEROPHAN □ NSC-57199 □ ORTHOPHENYLALANINE MUSTARD □ (±)-o-PHENYL ALANINE MUSTARD □ o-PHENYLALANINE MUSTARD □ o-di-SARCOLYSIN

TOXICITY DATA with REFERENCE:

ipr-rat LD50:3510 µg/kg BCPCA6 13,969,64

scu-mus LD50:18,480 µg/kg NCISP* JAN86

ivn-dog LDLo:190 µg/kg CCSUBJ 2,201,65

ivn-mky LDLo:380 µg/kg CCSUBJ 2,201,65

SAFETY PROFILE: Deadly poison by intraperitoneal, subcutaneous, and intravenous routes. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BHT750 CAS: 531-76-0 HR: 3
di-3-(p-(BIS(2-CHLOROETHYL)AMINO)PHENYL)
ALANINE

mf: $C_{13}H_{18}Cl_2N_2O_2$ mw: 305.23

PROP: Needles from MeOH. Mp: 180–181°.

SYNS: 3-(p-(BIS(2-CHLOROETHYL)AMINO)PHENYL)ALANINE □ 4-(BIS(2-CHLOROETHYL)AMINO)-di-PHENYLALANINE □ CB-3307 □ p-DI-(2-CHLOROETHYL)-AMINO-di-PHENYLALANIN (GERMAN) □ p-DI-(2-CHLOROETHYL)AMINO-di-PHENYLALANINE □ MERFALAN □ MERPHALAN □ o-MERPHALAN □ NCI-C04944 □ NSC-14210 □ PHENYLALANINE-LOST (GERMAN) □ di-PHENYLALANINE MUSTARD □ SAKOLYSIN (GERMAN) □ SARCOCLORIN □ di-SARCOLYSIN □ di-SARCOLYSINE

TOXICITY DATA with REFERENCE:

mmo-omi 10 mmol/L MUREAV 23,5,74

pic-omi 5 mmol/L MUREAV 1,355,64

orl-rat LD50:105 mg/kg AICCA6 20,144,64

ipr-rat LD50:18 mg/kg DKBSAS 171,801,66

ivn-rat LD50:25 mg/kg ARZNAD 8,340,58

ice-rat LD50:250 µg/kg JPPMAB 18,760,66

orl-mus LD50:35 mg/kg XPHPAW 441,165,74

ipr-mus LD50:26 mg/kg ARZNAD 16,634,66

CONSENSUS REPORTS: IARC Cancer Review: Group 2B IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 9,167,75; NCI Carcinogenesis Studies (ipr); Clear Evidence: mouse CANCAR 40,1935,77; No Evidence: rat CANCAR 40,1935,77.

SAFETY PROFILE: Suspected carcinogen with experimental tumorigenic data. A poison by ingestion, intraperitoneal, intravenous, and intracerebral routes. An experimental teratogen. Other experimental reproductive effects. Mutation data reported. An antineoplastic agent. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BHU500 CAS: 4213-34-7 HR: 3
3-(m-(BIS(β-CHLOROETHYL)AMINO)PHENYL)-
di-ALANINE HYDROCHLORIDE

mf: $C_{13}H_{18}Cl_2N_2O_2 \cdot ClH$ mw: 341.69

SYNS: METAPHENYLALANINE MUSTARD □ NCS-27381

TOXICITY DATA with REFERENCE:

ivn-dog LDLo:430 µg/kg CCSUBJ 2,201,65

ivn-mky LDLo:860 µg/kg CCSUBJ 2,201,65

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits very toxic fumes of Cl^- , NO_x and HCl.

BHU750 CAS: 4213-32-5 HR: 3
3-(p-(BIS(β-CHLOROETHYL)AMINO)PHENYL)-d-
ALANINE HYDROCHLORIDE

mf: $C_{13}H_{18}Cl_2N_2O_2 \cdot ClH$ mw: 341.69

SYNS: 4-(BIS(2-CHLOROETHYL)AMINO)-d-PHENYLALANINE MONOHYDROCHLORIDE □ NSC-35051 □ PHENYLALANINE MUSTARD □ d-PHENYLALANINE MUSTARD

TOXICITY DATA with REFERENCE:

ivn-dog LDLo:2 mg/kg CCSUBJ 2,201,65

ivn-mky LDLo:2 mg/kg CCSUBJ 2,201,65

SAFETY PROFILE: An intravenous poison. When heated to decomposition it emits very toxic fumes of Cl^- , NO_x , and HCl.

BHV000 CAS: 1465-26-5 HR: 3
3-(p-(BIS(β-CHLOROETHYL)AMINO)PHENYL)-
di-ALANINE HYDROCHLORIDE

mf: $C_{13}H_{18}Cl_2N_2O_2 \cdot ClH$ mw: 341.69

SYNS: ALKERAN (RUSSIAN) □ 4-(BIS(2-CHLOROETHYL)AMINO)-di-PHENYLALANINE MONOHYDROCHLORIDE □ CB 3008 □ MELPHALAN (RUSSIAN) □ MERPHALAN HYDROCHLORIDE □ NCS-14210 □ di-PHENYLALANINE MUSTARD HYDROCHLORIDE □ di-SARCOLYSINE HYDROCHLORIDE □ SARCOLYSIN HYDROCHLORIDE □ SARKOKLORIN □ SKI 21739

TOXICITY DATA with REFERENCE:

mmo-sat 100 µg/plate KHFZAN 16(10),11,82

mma-sat 100 µg/plate KHFZAN 16(10),11,82

dnd-esc 20 µmol/L MUREAV 89,95,81

pic-omi 5 mmol/L MUREAV 1,355,64

otr-mus:emb 1 µmol/L CBINA8 38,75,81

orl-rat LD50:52 mg/kg GTPZAB 11(3),28,67

ipr-rat LD50:16,200 µg/kg GTPZAB 11(3),28,67

orl-mus LD50:44,600 µg/kg GTPZAB 11(3),28,67

ivn-dog LDLo:430 µg/kg CCSUBJ 2,201,65

ivn-mky LDLo:860 µg/kg CCSUBJ 2,201,65

SAFETY PROFILE: Poison by ingestion.

intraperitoneal, and intravenous route. Human mutation

data reported. When heated to decomposition it emits

very toxic fumes of Cl⁻ and NO_x.

BHV250 CAS: 3223-07-2 HR: 3
I-3-(p-(BIS(2-CHLOROETHYL)AMINO)PHENYL)
ALANINE MONOHYDROCHLORIDE

mf: C₁₃H₁₈Cl₂N₂O₂•ClH mw: 341.69

SYNS: ALANINE NITROGEN MUSTARD □ CB 3025 □

MELPHALAN HYDROCHLORIDE □ NSC-8806 □ I-

PHENYLALANINE MUSTARD HYDROCHLORIDE □ I-

SARCOLYSINE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-hmn TDLo:1200 µg/kg/5D-I:GIT CCROBU
 57,369,73

ivn-dog LDLo:430 µg/kg CCSUBJ 2,201,65

ivn-mky LDLo:430 µg/kg CCSUBJ 2,201,65

SAFETY PROFILE: Deadly poison by intravenous route. Human systemic effects by ingestion: nausea and vomiting. Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits very toxic fumes of Cl⁻, NO_x, and HCl.

BHV500 CAS: 1233-89-2 HR: 3
p-(BIS(2-CHLOROETHYL)AMINO)PHENYL
BENZOATE

mf: C₁₇H₁₇Cl₂NO₂ mw: 338.25

SYN: p-(BIS(2-CHLOROETHYL)AMINO)PHENOL BENZOATE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:20 mg/kg JMCMA 12,491,69

ipr-mus LD50:18,500 µg/kg JMCMA 12,491,69

SAFETY PROFILE: Poison by intraperitoneal route. See also ESTERS. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHV750 CAS: 22953-53-3 HR: 3
p-(BIS(2-CHLOROETHYL)AMINO)PHENYL-p-
BROMOBENZOATE

mf: C₁₇H₁₆BrCl₂NO₂ mw: 417.15

SYN: p-(BIS(2-CHLOROETHYL)AMINO)PHENOL-p-BROMOBENZOATE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:27 mg/kg JMCMA 12,491,69

ipr-mus LD50:19 mg/kg JMCMA 12,491,69

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of Br⁻, Cl⁻, and NO_x.

BHW000 CAS: 22953-54-4 HR: 3
p-(BIS(2-CHLOROETHYL)AMINO)PHENYL-m-
CHLOROBENZOATE

mf: C₁₇H₁₆Cl₃NO₂ mw: 372.69

SYN: p-(BIS(2-CHLOROETHYL)AMINO)PHENOL-m-CHLOROBENZOATE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:42 mg/kg JMCMA 12,491,69

ipr-mus LD50:21 mg/kg JMCMA 12,491,69

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHW250 CAS: 21667-01-6 HR: 3
p-(BIS(2-CHLOROETHYL)AMINO)PHENYL-2,6-
DIMETHYLBENZOATE

mf: C₁₉H₂₁Cl₂NO₂ mw: 366.31

SYN: p-(BIS(2-CHLOROETHYL)AMINO)PHENOL-2,6-DIMETHYLBENZOATE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:290 mg/kg JMCMA 12,491,69

ipr-mus LD50:500 mg/kg JMCMA 12,491,69

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHW300 CAS: 5185-77-3 HR: 3
2-(p-BIS(2-CHLOROETHYL)AMINOPHENYL)-
1,3,2-DITHIARSENOLANE

mf: C₁₂H₁₆AsCl₂NS₂ mw: 384.23

SYN: 1,3,2-DITHIARSENOLANE, 2-(p-BIS(2-CHLOROETHYL)AMINOPHENYL)-

TOXICITY DATA with REFERENCE:

ipr-mus LD50:15 mg/kg JMCMA 9,221,66

OSHA PEL: TWA 0.5 mg(As)/m³

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits toxic fumes of NO_x, SO_x, As, and Cl⁻.

BHW500 CAS: 4465-92-3 HR: 3
4-(p-BIS(β-CHLOROETHYLAMINO)PHENYL
ETHYLAMINO)-7-CHLOROQUINOLINE
MONO HYDROCHLORIDE

SYN: NSC-50982

TOXICITY DATA with REFERENCE:

ivn-dog LDLo:11 mg/kg CCSUBJ 2,202,65

ivn-mky LDLo:11 mg/kg CCSUBJ 2,202,65

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHX250 CAS: 35849-41-3 HR: 3
I-3-(p-(BIS(2-CHLOROETHYL)AMINO)PHENYL)-
N-FORMYLALANINE

mf: C₁₄H₁₈Cl₂N₂O₃ mw: 333.24

SYN: N-FORMYL-L-p-SARCOLYSIN

TOXICITY DATA with REFERENCE:

orl-hmn TDLo:3 mg/kg:GIT XPHPAW 441,9,74

orl-rat LD50:700 mg/kg XPHPAW 441,9,74

ipr-rat LD50:80 mg/kg XPHPAW 441,9,74

orl-mus LD50:730 mg/kg XPHPAW 441,9,74

ipr-mus LD50:242 mg/kg NCISA* PH-43-63-1132

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. Human gastrointestinal effects by ingestion. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BHX275 CAS: 79967-32-1 HR: 3
4-(((p-(BIS(2-CHLOROETHYL)AMINO)PHENYL)-
IMINO)METHYL)-5-HYDROXY-6-METHYL-3-

PYRIDINEMETHANOLmf: C₁₈H₂₁Cl₂N₃O₂ mw: 382.32**SYN:** 3-PYRIDINEMETHANOL, 4-(((p-(BIS(2-CHLOROETHYL)AMINO)PHENYL)IMINO)METHYL)-5-HYDROXY-6-METHYL-**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:145 mg/kg DBANAD 33,1005,1980

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.**BHX300 CAS: 4587-15-9 HR: 3
m-(BIS(2-CHLOROETHYL)AMINO)PHENYL
MORPHOLINO KETONE**mf: C₁₅H₂₀Cl₂N₂O₂ mw: 331.27**TOXICITY DATA with REFERENCE:**

unr-rat LD50:40 mg/kg NEOLA4 27,261,80

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** A poison by an unreported route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.**BHY500 CAS: 857-95-4 HR: 3
o-(4-(BIS(2-CHLOROETHYL)AMINO)PHENYL)-
di-TYROSINE**mf: C₁₉H₂₂Cl₂N₂O₃ mw: 397.26**SYN:** PHENTYRIN**TOXICITY DATA with REFERENCE:**

orl-rat LD50:620 mg/kg FATOAO 43,100,80

ipr-rat LD50:115 mg/kg FATOAO 43,100,80

ivn-rat LD50:62 mg/kg FATOAO 43,100,80

orl-mus LD50:360 mg/kg FATOAO 43,100,80

ipr-mus LD50:110 mg/kg FATOAO 43,100,80

ivn-mus LD50:30 mg/kg FATOAO 43,100,80

SAFETY PROFILE: A poison by ingestion, intravenous, and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BHY625 CAS: 64508-90-3 HR: 3
5-(p-(BIS(2-CHLOROETHYL)AMINO)PHENYL)
VALERIC ACID**mf: C₁₅H₂₁Cl₂NO₂ mw: 318.27**SYNS:** 4-(BIS(2-CHLOROETHYL)AMINO)-

BENZENEPENTANOIC ACID (9CI) □ 5-(4-BIS(2-CHLOROETHYL)AMINOPHENYL)PENTANOIC ACID □ CB 1356

□ p-N,N-DI-(2-CHLOROETHYL)AMINOPHENYLVALERIC ACID

TOXICITY DATA with REFERENCE:

sln-dmg-par 5 mmol/L GENRA8 1,173,60

sln-dmg-unr 10 μmol/L ANYAA9 160,228,69

ipr-rat LDLo:50 mg/kg BCPA6 5,192,60

CONSENSUS REPORTS: EPA Genetic Toxicology Program.**SAFETY PROFILE:** Poison by intraperitoneal route. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x.**BHY750 CAS: 63815-37-2 HR: 3
β-(BIS(2-CHLOROETHYLAMINO)) PROPIO-
NITRILE**mf: C₇H₁₃Cl₂N₃ mw: 210.13**SYN:** USAF UCTL-958**TOXICITY DATA with REFERENCE:**ihl-mus LCLo:660 mg/m³/10M NDRC** No. 9-4-1-19,44

ipr-mus LD50:10 mg/kg NTIS** AD277-689

SAFETY PROFILE: Poison by inhalation and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BHZ000 CAS: 38915-00-3 HR: 3
9-((3-(BIS(2-CHLOROETHYL)AMINO)PROPYL)
AMINO)ACRIDINE DIHYDROCHLORIDE**mf: C₂₀H₂₃Cl₂N₃•2ClH mw: 449.28**SYN:** ICR 220**TOXICITY DATA with REFERENCE:**

msc-ham:ovr 1 g/L CNREA8 39,4875,79

ipr-mus LD20:1 mg/kg JMCMA15,739,72

SAFETY PROFILE: Mutation data reported. Poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of HCl, NO_x, and Cl⁻.**BIA000 CAS: 4213-40-5 HR: 3
o-(4-BIS(β-CHLOROETHYL)AMINO-o-TOLYL-
AZO) BENZOIC ACID**mf: C₁₈H₁₉Cl₂N₃O₂ mw: 380.30**SYN:** NSC-16498**TOXICITY DATA with REFERENCE:**

sln-dmg-par 35 μg BCPA6 5,206,60

ipr-rat LD50:45 mg/kg JNCIAM 50,243,73

ivn-dog LDLo:950 μg/kg CCSUBJ 2,202,65

ivn-mky LDLo:950 μg/kg CCSUBJ 2,202,65

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BIA100 CAS: 21447-87-0 HR: 3
3-(BIS(2-CHLOROETHYL)AMINO)-p-TOLYL
PIPERIDYL KETONE**mf: C₁₇H₂₄Cl₂N₂O mw: 343.33**SYNS:** 1-(3-(BIS(2-CHLOROETHYL)AMINO)-p-TOLUOYL)

PIPERIDINE □ KETONE, 3-(BIS(2-CHLOROETHYL)AMINO)-p-

TOLYL PIPERIDYL- □ PIPERIDINE, 1-(3-(BIS(2-CHLOROETHYL)

AMINO)-p-TOLUOYL)-

TOXICITY DATA with REFERENCE:

unr-rat LD50:50 mg/kg CTRRDO 62,2045,78

unr-mus LD50:50 mg/kg JMCMA12,161,69

DOT CLASSIFICATION: 3; Label: Flammable Liquid**SAFETY PROFILE:** A poison by an unreported route. A flammable liquid. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.**BIA250 CAS: 66-75-1 HR: 3
5-(BIS(2-CHLOROETHYL)AMINO)URACIL**mf: C₈H₁₁Cl₂N₃O₂ mw: 252.12**PROP:** Crystals from MeOH (aq). Mp: 206° (decomp).**SYNS:** AMINOACRIDINE DIHYDROCHLORIDE □ 5-(BIS(2-CHLOROETHYL)AMINO)-2,4(1H,3H)PYRIMIDINEDIONE □ 5-N,N-BIS(2-CHLOROETHYL)AMINOACRIDINE □ CB-4835 □ CHLORETHAMINACIL □ DEMETHYLDOPAN □ DESMETHYL DOPAN □ 5-(DI-(β-CHLOROETHYL)AMINO)URACIL □ 5-(DI-2-CHLOROETHYL)AMINOACRIDINE □ 2,6-DIHYDROXY-5-BIS(2-CHLOROETHYL)AMINOPYRIMIDINE □ ENT 50,439 □ NCI-C04820 □ NORDOPAN □ NSC-34462 □ RCRA WASTE NUMBER

U237 □ SK-19849 □ U-8344 □ URACILLOST □ URACILMOSTAZA

□ URACIL MUSTARD □ URAMUSTIN □ URAMUSTINE

TOXICITY DATA with REFERENCE:

mno-sat 125 µg/plate JNCIAM 62,893,79

mno-mus:lym 150 µg/L/2H MUREAV 59,61,79

orl-rat LD50:3550 µg/kg NYKZAU 60,413,64

ipr-rat LD50:1250 µg/kg ADTEAS 3,181,68

ipr-mus LDLo:3 mg/kg TXAPA9 23,288,72

CONSENSUS REPORTS: IARC Cancer Review:

Group 2B IMEMDT 7,370,87; Animal Sufficient

Evidence IMEMDT 9,235,75; NCI Carcinogenesis Studies

(ipr); Clear Evidence: mouse, rat RRCRB 52,1,75. EPA

Genetic Toxicology Program.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic and neoplastigenic data. A deadly poison by ingestion and intraperitoneal routes. Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BIA300 CAS: 5185-71-7 HR: 3 N,N-BIS(2-CHLOROETHYL)-p-ARSANILIC ACID

mf: C₁₀H₁₄AsCl₂NO₃ mw: 342.07

SYN: p-ARSANILIC ACID, N,N-BIS(2-CHLOROETHYL)-

TOXICITY DATA with REFERENCE:

ipr-mus LD50:8789 µg/kg JMCMA 9,221,66

OSHA PEL: TWA 0.5 mg(As)/m³

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits toxic fumes of NO_x, As, and Cl⁻.

BIA750 CAS: 55-51-6 HR: 3 N,N-BIS(2-CHLOROETHYL)BENZYLAMINE

mf: C₁₁H₁₅Cl₂N mw: 232.17

SYN: BENZYL BIS(β-CHLOROETHYL)AMINE □ BENZYL

NORMECHLORETHANAMINE □ N,N-BIS(2-CHLOROETHYL)

BENZENEMETHANAMINE □ BIS(2-CHLOROETHYL) BENZYL

AMINE □ DCBA □ DI-(2-CHLOROETHYL)BENZYLAMINE □

TL 965

TOXICITY DATA with REFERENCE:

dni-mus-ivg 5000 ppm JIDEAE 62,378,74

mno-asn 2500 µmol/L MUREAV 14,115,72

unr-rat LD50:10 mg/kg PHBUA 9 1,297,53

scu-mus LDLo:80 mg/kg NDRC* No. 9-4-1-9,43

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Poison by ingestion and possibly other routes. Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x. See also AROMATIC AMINES.

BIB250 CAS: 55112-89-5 HR: 3 N,N-BIS(2-CHLOROETHYL)BUTYLAMINE HYDROCHLORIDE

mf: C₈H₁₇Cl₂N•ClH mw: 234.62

SYN: BUTYL BIS(β-CHLOROETHYL)AMINE

HYDROCHLORIDE □ N-BUTYL-BIS(2-CHLOROETHYLAMINE)

HYDROCHLORIDE □ TL 513 HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:4890 µg/kg CANCAR 2,1055,49

scu-mus LDLo:2 mg/kg NTIS** PB158-507

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BIB750 CAS: 3597-20-4 HR: D N,N-BIS(2-CHLOROETHYL)-p-CHLOROBENZYL AMINE HYDROCHLORIDE

mf: C₁₁H₁₄Cl₃N•ClH mw: 303.07

SYN: p-CHLORO-DI-(2-CHLOROETHYL)BENZYLAMINE
HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

mno-asn 2500 µmol/L SOGEBZ 6,220,70

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits very toxic fumes as Cl⁻ and NO_x.

BIB800 CAS: 6294-34-4 HR: 2 BIS(2-CHLOROETHYL) (2-CHLOROETHYL) PHOSPHONATE

mf: C₆H₁₂Cl₃O₃P mw: 269.50

SYN: ANTIBLAGE 78 □ BIS-CHLOROETHYL 2-CHLORO-

ETHANEPHOSPHONATE □ BIS(β-CHLOROETHYL) β-

CHLOROETHYLPHOSPHONATE □ CP 877 □ ETHANOL, 2-

CHLORO-, (2-CHLOROETHYL)PHOSPHONATE (2:1) □

PHOSPHONIC ACID, (2-CHLOROETHYL)-, BIS(2-

CHLOROETHYL) ESTER

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD NTIS** OTS0545714

eye-rbt 100 mg/24H MLD NTIS** OTS0545714

orl-rat LD50:880 mg/kg NTIS** OTS0540437

orl-mus LD50:1530 mg/kg MTPEEI (2),21,1993

skn-rbt LD :>5500 mg/kg NTIS** OTS0545714

orl-gpg LD50:1740 mg/kg MTPEEI (2),21,1993

SAFETY PROFILE: Moderately toxic by ingestion. Low toxicity by skin contact. Experimental reproductive effects. A mild skin and eye irritant. When heated to decomposition it emits toxic vapors of PO_x and Cl⁻.

BIC325 HR: 3 1,4-BIS(2-CHLOROETHYL)-1,4-DIAZONIABICY CLO(2.2.1)HEPTANE (Z)-2-BUTENEDIOATE (1:2)

mf: C₉H₁₈Cl₂N₂•2C₄H₄O₄ mw: 457.35

SYN: NSC-262666

TOXICITY DATA with REFERENCE:

orl-mus LD50:746 mg/kg NCISP* JAN86

ipr-mus LD50:210 mg/kg NCISP* JAN86

ivn-mus LD50:73,290 µg/kg NCISP* JAN86

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x.

BIC500 CAS: 63918-36-5 HR: 3 N,N'-BIS(2-CHLOROETHYL)-N,N'-DIETHYLETHY LENEDIAMINE DIHYDROCHLORIDE

mf: C₁₀H₂₂Cl₂N₂•2ClH mw: 314.16

SYN: N,N'-ETHYL-N,N'-(β-CHLOROETHYL)ETHYLENEDIAMINE DIHYDROCHLORIDE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:2300 µg/kg JPETAB 100,398,50

ipr-mus LD50:3141 µg/kg JPETAB 94,249,48

SAFETY PROFILE: Deadly poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BIC600 CAS: 4213-41-6 HR: 2
N,N-BIS(2-CHLOROETHYL)-2,3-DIMETHOXY-ANILINE

mf: $\text{C}_{12}\text{H}_{17}\text{Cl}_2\text{NO}_2$ mw: 278.20

SYNS: ANILINE, N,N-BIS(2-CHLOROETHYL)-2,3-DIMETHOXY-
 □ 2,3-DIMETHOXYANILINE MUSTARD □ NSC-18439

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits toxic fumes of NO_x .

BID000 CAS: 6986-48-7 HR: 2
BIS(α -CHLOROETHYL) ETHER

mf: $\text{C}_4\text{H}_8\text{Cl}_2\text{O}$ mw: 143.02

PROP: Liquid. Bp: 112.5–114°.

SYN: 1,1'-OXYBIS(1-CHLOROETHANE)

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. See also ETHERS. When heated to decomposition it emits toxic fumes of Cl^- .

BID250 CAS: 538-07-8 HR: 3
BIS(2-CHLOROETHYL)ETHYLAMINE

mf: $\text{C}_6\text{H}_{13}\text{Cl}_2\text{N}$ mw: 170.10

SYNS: 2,2'-DICHLOROTRIETHYLAMINE □ ETHYLBIS(β -CHLOROETHYL)AMINE □ ETHYLBIS(2-CHLOROETHYL)AMINE □ ETHYL-S □ HN1 □ TL 329 □ TL 1149

TOXICITY DATA with REFERENCE:

skn-rat LD50:17 mg/kg JPETAB 91,224,47
 ivn-rat LD50:500 $\mu\text{g}/\text{kg}$ NTIS** PB158-507
 ihl-mus LC50:900 $\text{mg}/\text{m}^3/10\text{M}$ NTIS** PB158-508
 skn-mus LD50:13 mg/kg JPETAB 91,224,47
 ipr-mus LDLo:1030 $\mu\text{g}/\text{kg}$ NTIS** PB158-507
 scu-mus LDLo:1100 $\mu\text{g}/\text{kg}$ NTIS** PB158-507
 ihl-dog LC50:800 $\text{mg}/\text{m}^3/10\text{M}$ NTIS** PB158-508
 skn-mus LD50:13 mg/kg JPETAB 91,224,47
 ipr-mus LD50:1030 $\mu\text{g}/\text{kg}$ NTIS** PB158-507
 scu-mus LD50:1100 $\mu\text{g}/\text{kg}$ NTIS** PB158-507
 ihl-dog LC50:800 $\text{mg}/\text{m}^3/10\text{M}$ NTIS** PB158-508
 skn-dog LDLo:40 mg/kg NTIS** PB158-507
 ihl-mky LC50:1500 $\text{mg}/\text{m}^3/10\text{M}$ NTIS** PB158-508
 ihl-cat LC50:400 $\text{mg}/\text{m}^3/10\text{M}$ NTIS** PB158-508
 ihl-rbt LC50:900 $\text{mg}/\text{m}^3/20\text{M}$ NTIS** PB158-508
 ihl-gpg LC50:1500 $\text{mg}/\text{m}^3/30\text{M}$ NTIS** PB158-508
 ihl-dom LC50:1500 $\text{mg}/\text{m}^3/10\text{M}$ NTIS** PB158-508
 skn-dog LDLo:40 mg/kg NTIS** PB158-507
 skn-rbt LD50:15 mg/kg JPETAB 91,224,47
 ivn-rbt LDLo:2 mg/kg NTIS** PB158-507

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. EPA Extremely Hazardous Substances List.

SAFETY PROFILE: Deadly poison by inhalation, skin contact, ingestion, intravenous, subcutaneous, and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BID750 CAS: 111-91-1 HR: 3
BIS(β -CHLOROETHYL)FORMAL

mf: $\text{C}_5\text{H}_{10}\text{Cl}_2\text{O}_2$ mw: 173.05

PROP: Liquid. Bp: 217.5°, flash p: 230°F (OC), d: 1.23, vap d: 5.9.

SYNS: BIS(2-CHLOROETHOXY)METHANE □ BIS(2-CHLOROETHYL)FORMAL □ DICHLOROETHYL FORMAL □ DI-2-CHLOROETHYL FORMAL □ FORMALDEHYDE BIS(β -CHLOROETHYL) ACETAL □ 1,1'-(METHYLENEBIS(OXY))BIS(2-CHLOROETHANE) □ RCRA WASTE NUMBER U024

TOXICITY DATA with REFERENCE:

skn-rbt 10 mg/24H open JIHTAB 30,63,48
 eye-rbt 500 mg AJOPAA 29,1363,46
 orl-rat LD50:65 mg/kg JIHTAB 30,63,48
 ihl-rat LCLo:62 ppm/4H JIHTAB 31,343,49
 skn-gpg LD50:170 mg/kg JIHTAB 30,63,48

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by ingestion, inhalation, and skin contact. A skin and eye irritant. Combustible when exposed to heat or flame. Incompatible with oxidizers. To fight fire, use alcohol foam, foam, CO_2 , dry chemical. When heated to decomposition it emits toxic fumes of Cl^- . See also CHLORIDES.

BID800 CAS: 29023-83-4 HR: 3
9-(2,2-BIS(2-CHLOROETHYL)HYDRAZINO)ACRIDINE MONOHYDROCHLORIDE

mf: $\text{C}_{17}\text{H}_{17}\text{Cl}_2\text{N}_3 \cdot \text{ClH}$ mw: 370.73

SYNS: ACRIDINE, 9-(2,2-BIS(2-CHLOROETHYL)HYDRAZINO)-, MONOHYDROCHLORIDE □ 9-(2,2'-BIS- β -CHLORO-ETHYL-HYDRAZINO)ACRIDINE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

orl-rat LDLo:10 mg/kg USXXAM #3712943

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x , HCl , and Cl^- .

BIE250 CAS: 51-75-2 HR: 3
BIS(β -CHLOROETHYL)METHYLAMINE

mf: $\text{C}_5\text{H}_{11}\text{Cl}_2\text{N}$ mw: 156.07

PROP: Dark liquid. Mp: 1° @ 10 mm, bp: 86–87° @ 11 mm, d: 1.09 @ 25°, vap press: 0.17 mm @ 25°, vap d: 5.9. Sltly sol in water.

SYNS: BIS(2-CHLOROETHYL)METHYLAMINE □ N,N-BIS(2-CHLOROETHYL)METHYLAMINE □ CARYOLYSIN □ CHLORMETHINE □ CLORAMIN □ DICHLORAMINE □ DICHLOREN (GERMAN) □ β , β '-DICHLORODIETHYL-N-METHYLAMINE □ DI(2-CHLOROETHYL)METHYLAMINE □ 2,2'-DICHLORO-N-METHYLDIETHYLAMINE □ EMBICHIN □ ENT 25,294 □ HN2 □ MBA □ MECHLORETHAMINE □ N-METHYL-BIS-CHLORAEETHYLAMIN (GERMAN) □ METHYLBIS-(β -CHLOROETHYL)AMINE □ N-METHYL-BIS(β -CHLORO-ETHYL) AMINE □ N-METHYL-BIS(2-CHLOROETHYL)AMINE (MAK) □ N-METHYL-2,2'-DICHLORODIETHYLAMINE □ METHYLDI(2-CHLOROETHYL)AMINE □ N-METHYL-LOST □ MUSTARGEN □ MUSTINE □ MUTAGEN □ NITROGEN MUSTARD □ N-LOST (GERMAN) □ NSC-762 □ TL 146

TOXICITY DATA with REFERENCE:

eye-rbt 400 μg SEV AJOPAA 29,1553,46
 eye-rbt 20 $\mu\text{g}/30\text{M}$ INOPAO 15,308,76
 mmo-sat 40 $\mu\text{g}/\text{plate}$ CNREA8 37,2209,77
 dnr-bcs 10 $\mu\text{g}/\text{plate}$ TAKHAA 44,96,85
 dns-hmn:fbr 160 $\mu\text{g}/\text{L}$ TXYAC 21,151,81
 sce-hmn:lym 6250 ng/L CRNGDP 5,1637,84

orl-rat LD50:10 mg/kg NTIS** PB158-507
 ihl-rat LC50:600 mg/m³/2M NTIS** PB158-508
 skn-rat LD50:12 mg/kg FAATDF 5,S160,85
 ivn-rat LD50:1100 µg/kg NTIS** PB158-507
 orl-mus LD50:10 mg/kg NTIS** PB158-507
 ihl-mus LC50:1500 mg/m³/30M NTIS** PB158-508
 skn-mus LD50:29 mg/kg JPETAB 91,224,47
 ihl-dog LC50:2 g/m³/10M NTIS** PB158-508
 ihl-rbt LC50:1 g/m³/5M NTIS** PB158-508
 skn-rbt LD50:12 mg/kg NTIS** PB158-507

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory. EPA Extremely Hazardous Substances List. Community Right-To-Know List.

DFG MAK: Human Carcinogen

SAFETY PROFILE: Confirmed human carcinogen producing skin tumors by skin contact. Experimental carcinogenic, tumorigenic, and neoplastigenic data. A deadly poison by inhalation, ingestion, skin contact, and most other routes. Experimental teratogenic and reproductive effects. A powerful skin and eye irritant. Human mutation data reported. It has been used as a blistering agent in chemical warfare. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BIE500 CAS: 55-86-7 HR: 3
BIS(2-CHLOROETHYL)METHYLAMINE
HYDROCHLORIDE

mf: C₅H₁₁Cl₂N•ClH mw: 192.53

PROP: Leaflets from Me₂CO or CHCl₃. Mp: 119°.

SYNS: ANTIMIT □ AZOTOYPERITE □ C 6866 □ CAROLYSINE □ CARYOLYSINE □ CARYOLYSINE HYDROCHLORIDE □ CHLORAMIN □ CHLORAMINE □ CHLORAMIN HYDROCHLORIDE □ CHLORETHAMINE □ CHLORETHAZINE □ CHLORMETHINE HYDROCHLORIDE □ CHLORMETHINUM □ 2-CHLORO-N-(2-CHLOROETHYL)-N-METHYLETHANAMINE HYDROCHLORIDE □ DEMA □ DICHLOREN □ DICHLOREN HYDROCHLORIDE □ β,β'-DICHLORODIETHYL-N-METHYLAMINE HYDROCHLORIDE □ DI(2-CHLOROETHYL)METHYLAMINE HYDROCHLORIDE □ 1,5-DICHLORO-3-METHYL-3-AZAPENTANE HYDROCHLORIDE □ 2,2'-DICHLORO-N-METHYLDIETHYLAMINE HYDROCHLORIDE □ DIMITAN □ EMBECHINE □ EMBICHIN □ EMBICHIN HYDROCHLORIDE □ EMBIKHINE □ ERASOL □ ERASOL HYDROCHLORIDE □ ERASOL-IDO □ HN2.HCl □ HN2 HYDROCHLORIDE □ KLORAMIN □ N-LOST □ MBA HYDROCHLORIDE □ MEBI CHLORAMINE □ MECHLORETHAMINE HYDRO CHLORIDE □ MERCHLORETHANAMINE □ METHYLBIS(β-CHLOROETHYL)AMINE HYDROCHLORIDE □ N-METHYL-BIS-β-CHLORETHYLAMINE HYDROCHLORIDE □ METHYLBIS(2-CHLOROETHYL)AMINE HYDROCHLORIDE □ N-METHYLBIS(2-CHLOROETHYL)AMINE HYDROCHLORIDE □ N-METHYL-2,2'-DICHLORODIETHYLAMINE HYDROCHLORIDE □ N-METHYL-DI-2-CHLOROETHYLAMINE HYDROCHLORIDE □ METHYLDI (β-CHLOROETHYL)AMINE HYDROCHLORIDE □ METHYLDI(2-CHLOROETHYL)AMINE HYDROCHLORIDE □ MITOXINE □ N-MUSTARD (GERMAN) □ MUSTARGEN □ MUSTARGEN HYDRO CHLORIDE □ MUSTINE HYDROCHLOR □ MUSTINE HYDRO CHLORIDE □ NCI-C56382 □ NITOL □ NITOL "TAKEDA" □ NITROGEN MUSTARD HYDRO-CHLORIDE □ NITROGRANUL OGEN □ NITROGRANULOGEN

HYDROCHLORIDE □ NSC-762 □ NSC-762 HYDROCHLORIDE □ PLIVA □ STICKSTOFFLOST □ ZAGREB

TOXICITY DATA with REFERENCE:

sln-dmg-orl 5 mmol/L MUREAV 95,237,82
 dni-hmn:hla 1 µmol/L MUREAV 92,427,82
 msc-mus:lym 20 µg/L FCTOD7 23,115,85
 ivn-hmn TDLo:400 µg/kg:CNS,BLD CLPTAT 6,50,65
 orl-rat LD50:10 mg/kg JPETAB 91,224,47
 scu-rat LD50:1900 µg/kg JPETAB 91,224,47
 ivn-rat LD50:1100 µg/kg MEIEDD 10,822,83
 par-rat LD50:1700 µg/kg RRCRB 52,76,75
 orl-mus LD50:20 mg/kg JPETAB 91,224,47
 ipr-mus LD50:2900 µg/kg NYKZAU 62,96,66
 scu-mus LD50:2600 µg/kg JPETAB 91,224,47
 ivn-mus LD50:2 mg/kg JPETAB 91,224,47
 orl-rbt LD50:12,500 µg/kg NTIS** PB158-507
 ivn-rbt LD50:1600 µg/kg JPETAB 91,224,47

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 2A IMEMDT 7,269,87; Animal Sufficient Evidence IMEMDT 9,193,75. EPA Genetic Toxicology Program.

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Deadly poison by ingestion, intravenous, subcutaneous, intraperitoneal, and parenteral routes. Experimental teratogenic and reproductive effects. Human systemic effects by intravenous route: nausea or vomiting, reduction in the number of white blood cells and blood platelets. Other experimental reproductive effects. Human mutation data reported.

BIE600 CAS: 159277-20-0 HR: D
N,N-BIS(2-CHLOROETHYL)-4-(6-(5-(4-METHYL-1-PIPERAZINYL)(2,5'-BI-1H-BENZIMIDAZOL)-2'-YL)HEXYL)-BENZENAMINE,
HYDROCHLORIDE, HYDRATE (2:6:3)

mf: C₃₅H₄₃Cl₂N₇•3ClH•3/2H₂O mw: 768.74

TOXICITY DATA with REFERENCE:

mic-smc 150 mg/L MUREAV 329,19,1995
 mrc-smc 40 mg/L MUREAV 329,19,1995

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x, HCl and Cl⁻.

BIE610 CAS: 178481-68-0 HR: D
N,N-BIS(2-CHLOROETHYL)-4-(3-(5-(4-METHYL-1-PIPERAZINYL)(2,5'-BI-1H-BENZIMIDAZOL)-2'-YL)PROPYL)BENZENAMIDE

mf: C₃₂H₃₇Cl₂N₇ mw: 590.66

SYN: MGB2

TOXICITY DATA with REFERENCE:

mnt-ham-ovr 5 µmol/L MUREAV 448,35,2000
 msc-ham-ovr 5 µmol/L MUREAV 448,35,2000

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

BIE750 CAS: 63905-44-2 HR: 3
(N,N-BIS(2-CHLOROETHYL))-2-METHYL
PROPYLAMINE HYDROCHLORIDE

mf: C₈H₁₇Cl₂N•ClH mw: 234.62

SYNS: N,N-BIS(2-CHLOROETHYL)ISOBUTYLAMINE

HYDROCHLORIDE □ N,N-BIS(2-CHLOROETHYL)-2-METHYL-1-PROPANAMINE HYDROCHLORIDE □ 2,2'-DICHLORO-N-ISOBUTYL-DIETHYLAMINE HYDROCHLORIDE □ ISOBUTYL BIS(β-CHLOROETHYL)AMINE HYDROCHLORIDE □ ISOBUTYL BIS(2-CHLOROETHYL)AMINE HYDROCHLORIDE □ TL 525

TOXICITY DATA with REFERENCE:

ipr-mus LD50:4420 µg/kg CANCAR 2,1075,49

scu-mus LDLo:5 mg/kg NDRC** No. 9-4-1-9,43

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BIF250 CAS: 494-03-1 HR: 3**
N,N-BIS(2-CHLOROETHYL)-2-NAPHTHYLAMINEmf: C₁₄H₁₅Cl₂N mw: 268.20**PROP:** Platelets from pet ether. Mp: 54–56°, bp: 210° @ 5 mm.**SYNS:** 2-BIS(2-CHLOROETHYL)AMINONAPHTHALENE □ BIS(2-CHLOROETHYL)-β-NAPHTHYLAMINE □ CHLOR-NAFTINA □ CHLORNAPHAZIN □ CHLORNAPHTHIN □ CHLORONAFTINA □ CHLORONAPHTHINE □ CLOR-NAPHAZINE □ DICHLORO ETHYL-β-NAPHTHYLAMINE □ DI(2-CHLOROETHYL)-β-NAPHTHYLAMINE □ N,N-DI(2-CHLOROETHYL)-β-NAPHTHYL AMINE □ 2-N,N-DI(2-CHLOROETHYL)NAPHTHYLAMINE □ ERYSAN □ NAPHTHYLAMINE MUSTARD □ β-NAPHTHYL-BIS-(β-CHLOROETHYL)-AMINE □ 2-NAPHTHYLBIS(2-CHLORO ETHYL)AMINE □ β-NAPHTHYL-DI-(2-CHLOROETHYL)AMINE □ NSC-62209 □ R48 □ RCRA WASTE NUMBER U026**TOXICITY DATA with REFERENCE:**

mmo-sat 40 µg/plate CNREA8 37,2209,77

mma-sat 10 µg/plate PNASA6 72,5135,75

dnd-dmg-orl 260 µmol/L CNREA8 30,195,70

ipr-rat LD50:1086 mg/kg BCPA6 13,969,64

CONSENSUS REPORTS: IARC Cancer Review: Group 1 IMEMDT 7,130,87; Animal Sufficient Evidence IMEMDT 4,119,74; Human Sufficient Evidence IMEMDT 4,119,74. EPA Genetic Toxicology Program.**SAFETY PROFILE:** Confirmed human carcinogen producing bladder tumors. Human and experimental carcinogenic data. Moderately toxic by intraperitoneal route. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BIF500 CAS: 67856-68-2 HR: 2**
BIS(2-CHLOROETHYL)NITROSOAMINEmf: C₄H₈Cl₂N₂O mw: 171.04**SYNS:** NITROSOBIS(2-CHLOROETHYL)AMINE □ N-NITROSO-2,2'-DICHLORODIETHYLAMINE**TOXICITY DATA with REFERENCE:**

mmo-sat-10 µg/plate MUREAV 66,1,79

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl⁻ and NO_x. See also NITROSAMINES and N-NITROSO COMPOUNDS.**BIF625 CAS: 77469-44-4 HR: 3**
N,N'-BIS((2-CHLOROETHYL)-N-NITROSO**CARBAMOYL)CYSTAMINE**mf: C₁₀H₁₈Cl₂N₆O₄S₂ mw: 421.36**SYNS:** CNCC □ 13-CHLORO-N-(2-CHLOROETHYL)-N,11-DINITROSO-10-OXO-5,6-DITHIA-2,9,11-TRIAZATRIDEKANAMIDE □ DI((CHLORO-2-ETHYL)-2-N-NITROSO-N-CARBAMOYL)-N,N'-CYSTAMINE □ 1,1'-DITHIODIETHYLENEBIS(3-(2-(CHLORO ETHYL)-3-NITROSOUREA)) □ I.C.I.G. 1325**TOXICITY DATA with REFERENCE:**

mmo-sat 200 µg/plate INSSDM 19,165,81

mma-sat 200 µg/plate INSSDM 19,165,81

oms-mus:oth 20 mg/L INSSDM 19,229,81

orl-mus LD50:280 mg/kg INSSDM 19,123,81

ipr-mus LD50:75 mg/kg INSSDM 19,123,81

SAFETY PROFILE: Poison by ingestion and intraperitoneal routes. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl⁻, SO_x and NO_x.**BIF750 CAS: 154-93-8 HR: 3**
N,N'-BIS(2-CHLOROETHYL)-N-NITROSOUREAmf: C₅H₉Cl₂N₃O₂ mw: 214.07**PROP:** Light-yellow powder. Mp: 30–32°.**SYNS:** BCNU □ BiCNU □ BISCHLOROETHYLNITROSOUREA □ BIS(2-CHLOROETHYL)NITROSOUREA □ 1,3-BIS(β-CHLORO ETHYL)-1-NITROSOUREA □ 1,3-BIS-(2-CHLOROETHYL)-1-NITROSOUREA □ CARMUBRIS □ CARMUSTIN □ CARMUSTINE □ FDA 0345 □ NCI-C04773 □ NITRUMON □ NSC-409962 □ SK 27702 □ SRI 1720**TOXICITY DATA with REFERENCE:**

mmo-sat 33 µg/plate TCMUD8 5,319,85

sce-hmn:lym 25 µmol/L CNREA8 45,4798,85

ivn-cld LDLo:78 mg/kg/52W I CANCAR 42,74,78

ivn-hmn TDLo:125 mg/kg:BLD,GIT ACSRAJ 16,273,72

ivn-hmn TDLo:6 mg/kg:BLD,GIT CTRRDO 60,709,76

par-wmn LDLo:1566 mg/kg:PUL JAMAAP 244,687,80

orl-rat LD50:20 mg/kg JPETAB 166,104,69

ipr-rat LD50:17,420 µg/kg NCISP* JAN86

scu-rat LD50:83,200 µg/kg IYKEDH 9,766,78

ivn-rat LD50:13,800 µg/kg ONCOBS 37,177,80

ims-rat LD50:79,600 µg/kg IYKEDH 9,766,78

orl-mus LD50:19 mg/kg TXAPA9 21,405,72

ipr-mus LD50:21,260 µg/kg NCISP* JAN86

scu-mus LD50:24 mg/kg TXAPA9 21,405,72

ivn-mus LD50:45 mg/kg PSEBAA 118,756,65

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 2A IMEMDT 7,150,87; Human Limited Evidence IMEMDT 26,79,81; Animal Sufficient Evidence IMEMDT 26,79,81. NCI Carcinogenesis Studies (ipr); Some Evidence: rat CANCAR 40,1935,77; Clear Evidence: mouse CANCAR 40,1935,77. EPA Genetic Toxicology Program.**SAFETY PROFILE:** Confirmed carcinogen with experimental carcinogenic and tumorigenic data. A human poison by parenteral route. An experimental poison by ingestion, intravenous, intraperitoneal, parenteral, and subcutaneous routes. Human systemic effects by parenteral, intravenous, and possibly other routes: nausea or vomiting, reduced white blood cell and blood platelet counts, bone marrow damage, and potentially fatal respiratory system effects including lung fibrosis, dyspnea, and cyanosis. Experimental teratogenic and reproductive

effects. Human mutation data reported. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x . See also N-NITROSO COMPOUNDS.

BIG000 CAS: 68060-50-4 HR: D
1,3-BIS(2-CHLOROETHYL)-1-NITROSOUREA-DIPHENYLMETHANE

mf: $\text{C}_{19}\text{H}_{20}\text{Cl}_2\text{N}_6\text{O}_4$ mw: 467.35

SYN: 1,1'-DIPHENYLMETHYLENEBIS(3-(2-CHLOROETHYL)-3-NITROSOUREA)

TOXICITY DATA with REFERENCE:

sln-dmg-orl 100 $\mu\text{mol/L}$ MUREAV 57,297,78

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BIG250 CAS: 2067-58-5 HR: 3
N,N-BIS(2-CHLOROETHYL)-p-PHENYLENE DIAMINE

mf: $\text{C}_{10}\text{H}_{14}\text{Cl}_2\text{N}_2$ mw: 233.16

SYN: p-AMINOPHENYL DERIVATIVE of NITROGEN MUSTARD

TOXICITY DATA with REFERENCE:

ipr-rat LD50:2200 $\mu\text{g/kg}$ DBANAD 33,1005,80

ipr-mus LD50:7927 $\mu\text{g/kg}$ JMCMA 8,167,65

SAFETY PROFILE: Poison by intraperitoneal route. An experimental teratogen. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BIG500 CAS: 1070-42-4 HR: 3
BIS(2-CHLOROETHYL)PHOSPHITE

mf: $\text{C}_4\text{H}_9\text{Cl}_2\text{O}_3\text{P}$ mw: 207.00

PROP: Liquid. D: 1.40 @ 20°/4°, bp: 118–119° @ 4 mm.

TOXICITY DATA with REFERENCE:

orl-rat LD50:260 mg/kg AIHAAP 30,470,69

ipr-mus LDLo:250 mg/kg CBCCT* 7,790,55

skn-rbt LD50:141 mg/kg AIHAAP 30,470,69

SAFETY PROFILE: Poison by ingestion and skin contact. When heated to decomposition it emits very toxic fumes of PO_x and Cl^- .

BIG600 CAS: 6279-87-4 HR: 2
BIS(2-CHLOROETHYL) PHTHALATE

mf: $\text{C}_{12}\text{H}_{12}\text{Cl}_2\text{O}_4$ mw: 291.14

SYNS: 1,2-BENZENEDICARBOXYLIC ACID, BIS(2-CHLOROETHYL) ESTER □ BIS(2-CHLOROETHYL) 1,2-BENZENEDICARBOXYLATE □ CP 767 □ DI-2-CHLOROETHYL PHTHALATE □ PHTHALIC ACID, BIS(2-CHLOROETHYL) ESTER

TOXICITY DATA with REFERENCE:

eye-rbt 100 μL MLD NTIS** OTS0545759

orl-rat LD50:730 mg/kg NTIS** OTS0545759

skn-rbt LDLo:1260 mg/kg NTIS** OTS0545759

SAFETY PROFILE: Moderately toxic by ingestion and skin contact. A mild skin irritant. When heated to decomposition it emits toxic vapors of Cl^- .

BIG750 CAS: 63980-44-9 HR: 3
N,N'-BIS(2-CHLOROETHYL)-1,4-PIPERAZINE HYDROCHLORIDE

mf: $\text{C}_8\text{H}_{16}\text{Cl}_2\text{N}_2 \cdot \text{ClH}$ mw: 247.62

TOXICITY DATA with REFERENCE:

ipr-rat LD50:1100 $\mu\text{g/kg}$ JPETAB 100,398,50

ipr-mus LD50:5700 $\mu\text{g/kg}$ JPETAB 100,398,50

SAFETY PROFILE: Poison by intraperitoneal route.

When heated to decomposition it emits very toxic fumes of HCl and NO_x .

BIH000 CAS: 2045-41-2 HR: 3
N,N'-BIS(2-CHLOROETHYL)SULFANILAMIDE

mf: $\text{C}_{10}\text{H}_{14}\text{Cl}_2\text{N}_2\text{O}_2\text{S}$ mw: 297.22

TOXICITY DATA with REFERENCE:

ipr-rat LD50:336 mg/kg JMCMA 8,167,65

ipr-mus LD50:410 mg/kg JMCMA 8,167,65

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of Cl^- , NO_x , and SO_x .

BIH250 CAS: 505-60-2 HR: 3
BIS(2-CHLOROETHYL)SULFIDE

mf: $\text{C}_4\text{H}_8\text{Cl}_2\text{S}$ mw: 159.08

PROP: Colorless (if pure), to light-yellow, oily liquid. Mp: 13–14°, bp: 215–217°, flash p: 221°F, d: 1.2741 @ 20°/4°, vap d: 5.4, vap press: 0.09 mm @ 30°.

SYNS: BIS(β -CHLOROETHYL)SULFIDE □ BIS(2-CHLOROETHYL)SULPHIDE □ 1-CHLORO-2-(β -CHLOROETHYL THIO)-ETHANE □ β,β -DICHLOROETHYL-SULPHIDE □ 2,2'-DICHLORODIETHYL SULFIDE □ DI-2-CHLOROETHYL SULFIDE □ β,β -DICHLOROETHYL SULFIDE □ 2,2'-DICHLOROETHYL SULPHIDE (MAK) □ DISTILLED MUSTARD □ KAMPSTOFF "LOST" □ MUSTARD GAS □ MUSTARD HD □ MUSTARD VAPOR □ SCHWEFEL-LOST □ S-LOST □ S MUSTARD □ SULFUR MUSTARD □ SULFUR MUSTARD GAS □ SULPHUR MUSTARD GAS □ 1,1'-THIOBIS(2-CHLOROETHANE) □ YELLOW CROSS LIQUID □ YPERITE

TOXICITY DATA with REFERENCE:

skn-man 2000 mg/ m^3 /1H SEV NTIS** AD-A011-260

eye-man 100 mg/ m^3 /6H MOD NTIS** AD-A011-260

eye-rbt 200 mg/ m^3 NTIS** AD-A011-260

eye-rbt 200 mg/ m^3 /2M MLD NTIS** AD-A011-260

dnd-smc 500 $\mu\text{mol/L}$ CBINA8 44,27,83

cyt-mam:lym 750 nmol/L CHRTBC 3,162,72

oms-hmn:hla 75 mg/L IUSMDJ 9,41,79

ihl-hmn LC50:1500 mg/ m^3 /M NTIS** AD-A011-260

ihl-hmn LCLo:23 ppm/10M NTIS** PB214-270

skn-hmn LDLo:64 mg/kg WHOTAC -,24,70

ihl-rat LC50:100 mg/ m^3 /10M NTIS** PB158-507

skn-rat LD50:5 mg/kg CNRMAW 25,141,47

scu-rat LD50:1500 $\mu\text{g/kg}$ CNRMAW 25,141,47

ivn-rat LD50:700 $\mu\text{g/kg}$ JPETAB 93,1,48

ihl-mus LC50:120 mg/ m^3 /10M NTIS** PB158-507

skn-mus LD50:92 mg/kg JPETAB 93,1,48

scu-mus LD50:20 mg/kg NTIS** PB158-507

ivn-mus LD50:8600 $\mu\text{g/kg}$ JPETAB 93,1,48

ihl-dog LC50:70 mg/ m^3 /10M NTIS** PB158-507

skn-dog LD50:20 mg/kg NTIS** PB158-507

ivn-dog LD50:200 $\mu\text{g/kg}$ NTIS** PB158-507

ihl-mky LC50:80 mg/ m^3 /10M NTIS** PB158-507

skn-rbt LD50:40 mg/kg NTIS** PB158-507

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 7,259,87; Animal Sufficient Evidence IMEMDT 9,181,75;

Human Limited Evidence IMEMDT 9,181,75. EPA Extremely Hazardous Substances List. Community Right-To-Know List. EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory.

DFG MAK: Human Carcinogen

SAFETY PROFILE: Confirmed human carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. A human poison by inhalation and subcutaneous routes. An experimental poison by inhalation, skin contact, subcutaneous, and intravenous routes. An experimental teratogen. A severe human skin and eye irritant. Human mutation data reported. A military blistering gas. Strongly affects the skin, eyes, lungs, and gastric system. Pulmonary lesions are often fatal. It penetrates the skin deeply and injures blood vessels. Minute amounts can cause inflammation. Secondary infections are common. Combustible when exposed to heat or flame; can be ignited by a large explosive charge. It will react with water or steam to produce toxic and corrosive fumes. Vigorous reaction with oxidizing materials. Incompatible with bleaching powder. To fight fire, use water, foam, CO₂, dry chemical. Dangerous; when heated to decomposition or on contact with acid or acid fumes it emits highly toxic fumes of SO_x and Cl⁻. See also SULFIDES and CHLORIDES.

BIH325 **HR: 3**
1,1-BIS(2-CHLOROETHYL)-2-SULFINYL
HYDRAZINE

mf: C₄H₈Cl₂N₂OS mw: 203.10

SYN: NSC-78409

TOXICITY DATA with REFERENCE:

orl-mus LD50:37,240 µg/kg NCISP* JAN86
ipr-mus LD50:56,650 µg/kg NCISP* JAN86
scu-mus LD50:53,660 µg/kg NCISP* JAN86

SAFETY PROFILE: Poison by ingestion, subcutaneous and intraperitoneal routes. When heated to decomposition it emits toxic fumes of Cl⁻, SO_x, and NO_x.

BIH500 **CAS: 471-03-4** **HR: 3**
BIS(2-CHLOROETHYL)SULFONE

mf: C₄H₈Cl₂O₂S mw: 191.08

PROP: Leaflets from H₂O or EtOH. Mp: 56°, bp: 183° @ 20 mm.

SYNS: BIS(β-CHLOROETHYL)SULFONE □ MUSTARD GAS SULFONE □ MUSTARD SULFONE □ YPERITE SULFONE

TOXICITY DATA with REFERENCE:

scu-rat LD50:50 mg/kg JPETAB 93,1,48
scu-mus LD50:35 mg/kg JPETAB 93,1,48
ivn-mus LD50:50 mg/kg JPETAB 93,1,48
ihl-cat LCLo:1430 mg/m³/10M NDRC** NDCrc-132,JAN,42
ihl-rbt LCLo:1430 mg/m³/10M NDRC** NDCrc-132,JAN,42

SAFETY PROFILE: A poison via intravenous and subcutaneous routes. Moderately toxic via inhalation. See also SULFONATES. When heated to decomposition it emits very toxic fumes of Cl⁻ and SO_x.

BIH750 **HR: 3**
BIS(1-CHLOROETHYL THALLIUM CHLORIDE)

OXIDE

mf: C₄H₈Cl₄OTl₂ mw: 622.66

PROP: IDLH 15 mg/m³ (as Tl).

CONSENSUS REPORTS: Thallium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: An unstable explosive. When heated to decomposition it emits toxic fumes of Cl⁻. See also THALLIUM COMPOUNDS.

BI1000 **CAS: 14742-53-1** **HR: D**
N,N-BIS(2-CHLOROETHYL)-2-THENYLAMINE
HYDROCHLORIDE

mf: C₉H₁₃Cl₂NS•ClH mw: 274.6

SYN: DI-(2-CHLOROETHYL)THENYLAMINE HYDROCHLORIDE

TOXICITY DATA with REFERENCE:

mno-asn 2500 µmol/L SOGEBZ 6,220,70

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻, NO_x, and SO_x.

BI1250 **CAS: 108-60-1** **HR: 3**
BIS(2-CHLOROISOPROPYL) ETHER
DOT: UN 2490

mf: C₆H₁₂Cl₂O mw: 171.08

PROP: Colorless liquid. Bp: 187.8°, fp: >-20°, flash p: 185°F (OC), d: 1.11 @ 25°/25°, vap d: 6.0, vap press: 0.10 mm @ 20°.

SYNS: BIS(β-CHLOROISOPROPYL)ETHER □ BIS(2-CHLORO-1-METHYLETHYL) ETHER □ BIS(1-CHLORO-2-PROPYL) ETHER □ (2-CHLORO-1-METHYLETHYL) ETHER □ DCIP □ DCIP (nematocide) □ DICHLORODIISOPROPYL ETHER □ β,β'-DICHLORODIISOPROPYL ETHER □ DICHLOROISOPROPYL ETHER □ 2,2'-DICHLOROISOPROPYL ETHER □ DICHLOROISO PROPYL ETHER (DOT) □ NCI-C50044 □ NEMAMORT □ 2,2'-OXYBIS(1-CHLOROPROPANE) □ PROPANE, 2,2'-OXYBIS(1-CHLORO)- □ RCRA WASTE NUMBER U027

TOXICITY DATA with REFERENCE:

eye-rbt 500 mg open AMIHBC 4,119,51
mmo-sat 1 mL/plate/3H DHEFDK FDA-78-1046,78
mma-sat 333 µg/plate ENMUDM 8(Suppl 7),1,86
orl-rat LD50:240 mg/kg AMIHBC 4,119,51
skn-rat LD50:>2 g/kg PEMNDP 9,83,91
orl-mus LD50:503 mg/kg FMCHA2 -,C216,91
ihl-rat LCLo:700 ppm/5H BJIMAG 27,1,70
skn-rbt LD50:3000 mg/kg AMIHBC 4,119,51

CONSENSUS REPORTS: IARC Cancer Review:

Group 3 IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 41,149,86. NCI Carcinogenesis Bioassay (gavage); No Evidence: rat NCITR* NCI-CG-TR-191,79. Community Right-To-Know List. Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 6.1; Label: Poison

SAFETY PROFILE: Poison by ingestion. Moderately toxic by skin contact and inhalation. An eye irritant. Questionable carcinogen. Mutation data reported. A corrosive material. Moderate fire hazard when exposed to heat, flame, or powerful oxidizers. Incompatible with oxidizing materials. To fight fire, use water to blanket fire; foam, CO₂, dry chemical. When heated to decomposition it emits highly toxic fumes of Cl⁻. See also ETHERS.

BI1500 CAS: 67465-41-2 HR: 3**2,5-BIS(CHLOROMERCURI)FURAN**mf: $C_4H_2Cl_2Hg_2O$ mw: 538.14**PROP:** IDLH 10 mg/m³ (as Hg).**SYN:** USAF UCTL-974**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:20 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: Mercury and its compounds are on the Community Right-To-Know List.**OSHA PEL:** CL 0.1 mg(Hg)/m³ (skin)**ACGIH TLV:** TWA 0.1 mg(Hg)/m³ (skin); BEI: 35 µg/g creatinine total inorganic mercury in urine preshift; 15 µg/g creatinine total inorganic mercury in blood at end of shift at end of workweek.**DFG MAK:** Confirmed Animal Carcinogen with Unknown Relevance to Humans**NIOSH REL:** (Mercury, Aryl and Inorganic) CL 0.1 mg/m³ (skin)**SAFETY PROFILE:** Poison by intraperitoneal route. See also MERCURY COMPOUNDS and CHLORIDES. When heated to decomposition it emits very toxic fumes of Cl⁻ and Hg.**BI1750 HR: 3****N,N-BIS(CHLOROMERCURI)HYDRAZINE**mf: $Cl_2H_2Hg_2N_2$ mw: 502.01**PROP:** IDLH 10 mg/m³ (as Hg).**CONSENSUS REPORTS:** Mercury and its compounds are on The Community Right-To-Know List.**SAFETY PROFILE:** An explosive. When heated to decomposition it emits toxic fumes of Cl⁻, NO_x, and Hg. See also MERCURY COMPOUNDS.**BIJ000 CAS: 64050-46-0 HR: 3****4,5-BIS(CHLOROMERCURI)-2-THIAZOLE-CARBAMIC ACID BENZYL ESTER**mf: $C_{11}H_8Cl_2Hg_2N_2O_2S$ mw: 704.35**PROP:** IDLH 10 mg/m³ (as Hg).**TOXICITY DATA with REFERENCE:**

ipr-mus LDLo:125 mg/kg CBCCT* 8,752,56

CONSENSUS REPORTS: Mercury and its compounds are on The Community Right-To-Know List.**OSHA PEL:** CL 0.1 mg(Hg)/m³ (skin)**ACGIH TLV:** TWA 0.1 mg(Hg)/m³ (skin); BEI: 35 µg/g creatinine total inorganic mercury in urine preshift; 15 µg/g creatinine total inorganic mercury in blood at end of shift at end of workweek.**DFG MAK:** Confirmed Animal Carcinogen with Unknown Relevance to Humans**NIOSH REL:** (Mercury, Aryl and Inorganic) CL 0.1 mg/m³ (skin)**SAFETY PROFILE:** Poison by intraperitoneal route. See also CARBAMATES; MERCURY COMPOUNDS; and ESTERS. When heated to decomposition it emits very toxic fumes of Cl⁻, Hg, NO_x, and SO_x.**BIJ250 CAS: 13483-18-6 HR: 2****BIS-1,2-(CHLOROMETHOXY)ETHANE**mf: $C_4H_8Cl_2O_2$ mw: 159.02**PROP:** Viscous liquid. Bp: 99–100° @ 22 mm, d: 1.2879 @ 14°/15°.**SYN:** ETHYLENE GLYCOL BIS(CHLOROMETHYL)ETHER**CONSENSUS REPORTS:** IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 15,31,77. Reported in EPA TSCA Inventory. Glycol ethers are on the Community Right-To-Know List.**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. See also GLYCOL ETHERS. When heated to decomposition it emits toxic fumes of Cl⁻.**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: see 1,2-Dichlorodifluoroethane 1018.**BIJ500 CAS: 56894-91-8 HR: 2**
1,4-BIS(CHLOROMETHOXYMETHYL)BENZENEmf: $C_{10}H_{12}Cl_2O_2$ mw: 235.12**PROP:** Solid. Mp: 91.5–94.5°.**SYN:** BIS-1,4-(CHLOROMETHOXY)-p-XYLENE**CONSENSUS REPORTS:** IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Sufficient Evidence IMEMDT 15,37,77.**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic and tumorigenic data. When heated to decomposition it emits toxic fumes of Cl⁻.**BIJ750 CAS: 10387-13-0 HR: 3**
9,10-BIS(CHLOROMETHYL)ANTHRACENEmf: $C_{16}H_{12}Cl_2$ mw: 275.18**PROP:** Crystals from xylene; yellow blades from toluene. Mp: 258–260° (decomp @ 2°).**SYNS:** 9,10-DI(CHLOROMETHYL)ANTHRACENE □ ICR-450**TOXICITY DATA with REFERENCE:**

mma-sat 100 ng/plate PNASa 72,5135,75

ivn-mus LD50:56 mg/kg CSLNX* NX#00245

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.**SAFETY PROFILE:** Poison by intravenous route. Questionable carcinogen with experimental neoplastigenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl⁻. See also CHLORINATED HYDROCARBONS, AROMATIC.**BIK000 CAS: 542-88-1 HR: 3**
BIS(CHLOROMETHYL) ETHER**DOT:** UN 2249mf: $C_2H_4Cl_2O$ mw: 114.96**PROP:** Volatile liquid. Bp: 105°, d: 1.315 @ 20°, vap d: 4.0, flash p: <19°, fp: -41.5°.**SYNS:** BCME □ BIS-CME □ CHLORO(CHLOROMETHOXY) METHANE □ DICHLORDIMETHYLAETHER (GERMAN) □ sym-DICHLORODIMETHYL ETHER (DOT) □ sym-DICHLORO METHYL ETHER □ DIMETHYL-1,1'-DICHLOROETHER □ OXYBIS(CHLOROMETHANE) □ RCRA WASTE NUMBER P016**TOXICITY DATA with REFERENCE:**

otr-ham:kdy 80 µg/L BJCAAI 37,873,78

mma-sat 20 µg/plate BJCAAI 37,873,78

dns-hmn:fbr 160 µg/L TXCYAC 21,151,81

dns-mus-skn 360 µmol/kg/L CNREA8 33,769,73

ihl-man TClO:3 ppm:EYE TJSAG8 51,596,73

ihl-man LCLo:100 ppm/3M:PUL TJSGA8 51,596,73
 orl-rat LD50:210 mg/kg AIHAAP 30,470,69
 ihl-rat LC50:7 ppm/7H AEHLAU 30,61,75
 ihl-mus LC50:25 mg/m³/6H AEHLAU 22,663,71
 skn-rbt LD50:280 mg/kg AIHAAP 30,470,69
 ihl-ham LC50:7 ppm/7H AEHLAU 30,61,75

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 7,131,87; Animal Sufficient Evidence IMEMDT 4,231,74; Human Sufficient Evidence IMEMDT 4,231,74. Community Right-To-Know List. EPA Extremely Hazardous Substances List. Reported in EPA TSCA Inventory.

OSHA PEL: OSHA: Cancer Suspect Agent

ACGIH TLV: TWA 0.001 ppm; Confirmed Human Carcinogen

DFG MAK: Human Carcinogen

DOT CLASSIFICATION: 6.1; Label: Poison

SAFETY PROFILE: Confirmed human carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Poison by inhalation, ingestion, and skin contact. Human systemic effects by inhalation: irritation of the conjunctiva, unspecified nasal and respiratory effects. Human mutation data reported. A dangerous fire hazard. When heated to decomposition it emits very toxic fumes of Cl⁻. See also ETHERS.

ANALYTICAL METHOD: For occupational chemical analysis use OSHA: #10.

BIK100 **HR: 2**
BIS(2-CHLORO-1-METHYLETHYL)ETHER mixed
with 2-CHLORO-1-METHYLETHYL-(2-
CHLORO PROPYL) ETHER

mf: C₆H₁₂Cl₂O mw: 171.08

SYN: ETHER, BIS(2-CHLORO-1-METHYLETHYL), mixed with 2-CHLORO-1-METHYLETHYL-(2-CHLOROPROPYL)ETHER (7:3)

CONSENSUS REPORTS: NTP

CARCINOGENESIS BIOASSAY (gavage); Clear Evidence: mouse NTPTR* NTP-TR-239,83

SAFETY PROFILE: Questionable carcinogen with experimental carcinogenic data. When heated to decomposition it emits toxic fumes of Cl⁻.

BIK250 **CAS: 534-07-6** **HR: 3**
BIS(CHLOROMETHYL)KETONE

DOT: UN 2649

mf: C₃H₄Cl₂O mw: 126.97

PROP: Crystals. Mp: 45°, bp: 173°, d: 1.3826 @ 46°/4°, vap d: 4.38. Sol in water.

SYNS: sym-DICHLOROACETONE □ α,α'-

DICHLOROACETONE □ α,γ-DICHLOROACETONE □ 1,3-DICHLOROACETONE □ 1,3-DICHLOROACETONE (DOT) □ 1,3-DICHLORO-2-PROPANONE

TOXICITY DATA with REFERENCE:

mmo-sat 1250 ng/plate MUREAV 157,111,85

mma-smc 5 µg/L MUREAV 155,53,85

ihl-rat LC50:29 mg/m³/2H 85GMAT -,44,82

ihl-mus LC50:27 mg/m³/2H 85GMAT -,44,82

CONSENSUS REPORTS: EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory. EPA Extremely Hazardous Substances List.

DOT CLASSIFICATION: 6.1; Label: Poison

SAFETY PROFILE: Poison by inhalation. Mutation data reported. A systemic irritant by ingestion and inhalation routes. See also KETONES. Dangerous; when heated to decomposition it emits highly toxic fumes of Cl⁻.

BIK325 **CAS: 78-71-7** **HR: 3**
3,3-BIS(CHLOROMETHYL)OXETANE

mf: C₅H₈Cl₂O mw: 155.03

PROP: Liquid. D: 1.295 @ 25°/25°. Mp: 18.7°, bp: 101° @ 27 mm.

SYN: 3,3-DICHLOROMETHYLOXYCYCLOBUTANE

TOXICITY DATA with REFERENCE:

orl-rat LD50:600 mg/kg FATOBP 5,157,70

orl-mus LD50:420 mg/kg 85GMAT -,47,82

ihl-mus LC50:200 mg/m³/2H 85GMAT -,47,82

CONSENSUS REPORTS: EPA Extremely Hazardous Substances List.

SAFETY PROFILE: Poison by ingestion and inhalation. When heated to decomposition it emits toxic fumes of Cl⁻.

BIK500 **CAS: 2209-86-1** **HR: 2**
2,2-BIS(CHLOROMETHYL)-1,3-PROPANEDIOL

mf: C₅H₁₀Cl₂O₂ mw: 173.05

PROP: Crystals. Mp: 79-80°, bp: 160° @ 12 mm. Sol in water.

SYN: DISPRANOL

TOXICITY DATA with REFERENCE:

orl-rat LD50:1285 mg/kg BCFAAI 99,67,60

ipr-rat LD50:920 mg/kg BCFAAI 99,67,60

ipr-mus LD50:812 mg/kg BCFAAI 99,67,60

unr-mus LD50:1 g/kg RPTOAN 48,67,85

SAFETY PROFILE: Moderately toxic by ingestion, intraperitoneal, and possibly other routes. When heated to decomposition it emits toxic fumes of Cl⁻.

BIK750 **CAS: 12712-28-6** **HR: 3**
2,2-BIS(CHLOROMETHYL)-1,3-PROPANEDIOL
SULFATE

mf: C₅H₁₀Cl₂O₂•H₂O₄S mw: 271.13

SYN: PHILIPS 2605

TOXICITY DATA with REFERENCE:

orl-rat LD50:20 mg/kg TXAPA9 21,315,72

orl-bwd LD50:2400 µg/kg TXAPA9 21,315,72

SAFETY PROFILE: Poison by ingestion. See also SULFATES. When heated to decomposition it emits very toxic fumes of SO_x and Cl⁻.

BIL000 **CAS: 52444-01-6** **HR: D**
BIS(2-CHLOROMETHYL-2-PROPYL)SULFIDE

mf: C₈H₁₆Cl₂S mw: 215.20

SYN: α,α,α',α'-TETRAMETHYL-β,β'-BISCHLOROETHYL SULFIDE

TOXICITY DATA with REFERENCE:

dnd-ckn:leu 30 mmol/L TELEAY (29),2477,75

SAFETY PROFILE: Mutation data reported. See also SULFIDES. When heated to decomposition it emits very toxic fumes of Cl⁻ and SO_x.

BIL250 CAS: 14579-91-0 HR: 3
1,3-BIS(CHLOROMETHYL)-1,1,3,3-TETRA
METHYLDISILAZANEmf: C₆H₁₇Cl₂N-Si₂ mw: 230.32**PROP:** Liquid. D: 1.0543° @ 20 mm, bp: 103–105° @ 10 mm.**SYN:** 1-(CHLOROMETHYL)-N-((CHLOROMETHYL) DIMETHYL SILYL)-1,1-DIMETHYL-SILANAMINE**TOXICITY DATA with REFERENCE:**

ipr-mus LDLo:250 mg/kg StoGD# 27May75

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal route. Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BIL500 CAS: 83-05-6 HR: 2**
BIS(p-CHLOROPHENYL)ACETIC ACIDmf: C₁₄H₁₀Cl₂O₂ mw: 281.14**SYNS:** BIS(4-CHLOROPHENYL)ACETIC ACID □ BIS(p-CHLOROPHENYL)ESSIGSAEURE (GERMAN) □ DICHLORO DIPHENYL ACETIC ACID □ p,p'-DICHLORODIPHENYLACETIC ACID □ DI(p-CHLOROPHENYL)ACETIC ACID**TOXICITY DATA with REFERENCE:**

sln-dmg-orl 3700 µmol/L MUREAV 16,157,72

cyt-rat:oth 150 mg/L/24H C TXAPA9 22,355,72

orl-mus LD50:590 mg/kg AIPTAK 73,128,46

SAFETY PROFILE: Moderately toxic by ingestion. An experimental teratogen. Other experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl⁻.**BIM000 CAS: 4104-14-7 HR: 3**
O,O-BIS(p-CHLOROPHENYL)ACETIMIDOYL-
PHOSPHORAMIDOTHIOATEmf: C₁₄H₁₃Cl₂N₂O₂PS mw: 375.22**SYNS:** BAY 33819 □ BAYER 38819 □ DRC-714 □ GOPHACIDE □ PHOSAZETIM**TOXICITY DATA with REFERENCE:**

orl-rat LD50:3700 µg/kg FMCHA2 -,C117,83

skn-rat LD50:25 mg/kg FMCHA2 -,C117,83

ipr-rat LD50:3500 µg/kg AIPTAK 169,108,67

orl-mus LD50:12 mg/kg TXAPA9 25,42,73

ipr-mus LD50:5500 µg/kg AIPTAK 169,108,67

orl-dog LD50:23 mg/kg PCOC** -,107,66

orl-gpg LD50:20 mg/kg AIPTAK 169,108,67

ipr-gpg LD50:14 mg/kg AIPTAK 169,108,67

CONSENSUS REPORTS: EPA Extremely Hazardous Substances List.**SAFETY PROFILE:** Poison by ingestion, skin contact, and intraperitoneal routes. A pesticide. When heated to decomposition it emits very toxic fumes of SO_x, PO_x, Cl⁻, and NO_x. See also ESTERS.**BIM100 CAS: 64005-91-0 HR: 3**
2,7-BIS(4-CHLOROPHENYL)BENZO(lmn)(3,8)-
PHENANTHROLINE-1,3,6,8(2H,7H)-
TETRAONEmf: C₂₆H₁₂Cl₂N₂O₄ mw: 487.30**TOXICITY DATA with REFERENCE:**

ipr-mus TDLo:0.78 mg/kg FRMCE8 55,319,2000

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.**BIM250 CAS: 55-56-1 HR: 3**
1,6-BIS(5-(p-CHLOROPHENYL)BIGUANIDINO)
HEXANEmf: C₂₂H₃₀Cl₂N₁₀ mw: 505.52**PROP:** Solid. Mp: 134°.**SYNS:** 1,6-BIS(p-CHLOROPHENYLDIGUANIDO)HEXANE □ CHLORHEXIDIN (CZECH) □ CHLORHEXIDINE □ 1,6-DI(4'-CHLOROPHENYLDIGUANIDO)HEXANE □ 1,1'-HEXA METHYLENEBIS(5-(p-CHLOROPHENYL)BIGUANIDE) □ HIBITANE □ NOLVASAN □ ROTERSEPT □ STERIDO**TOXICITY DATA with REFERENCE:**

skn-hmn 1500 µg/3D-I MLD 85DKA8 -,127,77

mma-sat 400 nmol/L CBINA8 28,249,79

dnr-esc 7 µmol/disc CBINA8 28,249,79

orl-rat LD50:9200 mg/kg YACHDS 6,2599,78

ipr-rat LD50:60 mg/kg VTYMAC 72,1330,77

ivn-rat LD50:21 mg/kg RMISDU 23,45,80

orl-mus LD50:2515 mg/kg RMISDU 23,45,80

ipr-mus LD50:44 mg/kg VTYMAC 72,1330,77

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Mildly toxic by ingestion. Experimental reproductive effects. A human skin irritant. Mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BIM300 CAS: 1022-22-6 HR: 2**
1,1-BIS(p-CHLOROPHENYL)-2-CHLORO
ETHYLENEmf: C₁₄H₉Cl₃ mw: 283.58**SYN:** ETHYLENE, 1,1-BIS(p-CHLOROPHENYL)-2-CHLORO-**TOXICITY DATA with REFERENCE:**

orl-mus LD50:2700 mg/kg AIPTAK 73,128,46

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of Cl⁻.**BIM500 CAS: 72-54-8 HR: 3**
1,1-BIS(4-CHLOROPHENYL)-2,2-DICHLORO
ETHANEmf: C₁₄H₁₀Cl₄ mw: 320.04**PROP:** Crystalline solid from pet ether. Mp: 111°, vap d: 11.**SYNS:** 1,1-BIS(p-CHLOROPHENYL)-2,2-DICHLOROETHANE □ 2,2-BIS(p-CHLOROPHENYL)-1,1-DICHLOROETHANE □ 2,2-BIS(4-CHLOROPHENYL)-1,1-DICHLOROETHANE □ DDD □ p,p'-DDD □ 1,1-DICHLORO-2,2-BIS(4-CHLORO FENYL)-ETHAAN (DUTCH) □ 1,1-DICHLORO-2,2-BIS(4-CHLOR-PHENYL)-AETHAN (GERMAN) □ 1,1-DICHLORO-2,2-BIS(p-CHLORO-PHENYL)ETHANE □ 1,1-DICHLORO-2,2-BIS(p-CHLORO-PHENYL)ETHANE (DOT) □ 1,1-DICHLORO-2,2-BIS(4-CHLORO-PHENYL)-ETHANE (FRENCH) □ 1,1-DICHLORO-2,2-BIS(PARA-CHLOROPHENYL)ETHANE (DOT) □ 1,1-DICHLORO-2,2-DI(4-CHLOROPHENYL)ETHANE □ DICHLORODIPHENYL DICHLOROETHANE □ p,p'-DICHLORO DIPHENYL-DICHLOROETHANE □ 1,1-DICHLORO-2,2-BIS(4-CHLORO-FENIL)-ETANO (ITALIAN) □ DILENE □ ENT 4,225 □ ME-1700 □ NCI-

C00475 □ RCRA WASTE NUMBER U060 □ RHOTHANE □ RHOTHANE D-3 □ ROTHANE □ p,p'-TDE □ TDE (DOT) □ TETRACHLORODIPHENYLETHANE

TOXICITY DATA with REFERENCE:

cyt-rat:oth 10 µg/L 34LXAP -,555,76
otr-mus:emb 28,400 nmol/L JNCIAM 54,981,75
orl-rat LD50:113 mg/kg GUCHAZ 6,154,73
orl-mus LDLo:600 mg/kg JPETAB 88,400,46
skn-rbt LD50:1200 mg/kg AFDOAQ 16,3,52

CONSENSUS REPORTS: IARC Cancer Review: Animal Sufficient Evidence IMEMDT 5,83,74. NCI Carcinogenesis Bioassay (feed); Clear Evidence: rat NCITR* NCI-CG-TR-131,78; No Evidence: mouse NCITR* NCI-CG-TR-131,78. EPA Genetic Toxicology Program.

SAFETY PROFILE: Confirmed carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Poison by ingestion. Moderately toxic by skin contact. Mutation data reported. An insecticide. When heated to decomposition it emits toxic fumes of Cl⁻. See also DDT.

B1M750 CAS: 72-55-9 HR: 3
2,2-BIS(p-CHLOROPHENYL)-1,1-DICHLORO ETHYLENE

mf: C₁₄H₈Cl₄ mw: 318.02

SYNS: DDE □ p,p'-DDE □ DDT DEHYDROCHLORIDE □ 1,1-DICHLORO-2,2-BIS(p-CHLOROPHENYL)ETHYLENE □ p,p'-DICHLORODIPHENYLDICHLOROETHYLENE □ 1,1'-(DICHLORO ETHENYLIDENE)BIS(4-CHLOROBENZENE) □ NCI-C00555

TOXICITY DATA with REFERENCE:

sln-dmg-orl 1 pph ENMUDM 7,325,85
msc-mus:lym 40 mg/L/4H MUREAV 59,61,79
orl-rat LD50:880 mg/kg TXAPA9 14,515,69
orl-mus LD50:700 mg/kg JPETAB 88,400,46

CONSENSUS REPORTS: IARC Cancer Review: Animal Limited Evidence IMEMDT 5,83,74. NCI Carcinogenesis Bioassay (feed); Clear Evidence: mouse NCITR* NCI-CG-TR-131,78; No Evidence: rat NCITR* NCI-CG-TR-131,78. EPA Genetic Toxicology Program.

SAFETY PROFILE: Suspected carcinogen with experimental carcinogenic and neoplastigenic data. Poison by ingestion. Experimental reproductive effects. Mutation data reported. An insecticide. When heated to decomposition it emits very toxic fumes of Cl⁻. See also CHLORINATED HYDROCARBONS, ALIPHATIC.

B1M775 CAS: 3547-04-4 HR: 2
2,2-BIS(p-CHLOROPHENYL)ETHANE

mf: C₁₄H₁₂Cl₂ mw: 251.16

SYNS: DDNS □ p,p'-DICHLORODIPHENYL ETHANE □ DIMIC □ ETHANE, 1,1-BIS(p-CHLOROPHENYL)- □ K 3926

TOXICITY DATA with REFERENCE:

dni-orl-mus 50 mg/kg MUREAV 46,305,77
orl-rat LD50:1 g/kg JPETAB 88,359,46

SAFETY PROFILE: Moderately toxic by ingestion. Mutation data reported. When heated to decomposition it emits toxic vapors of Cl⁻.

B1M800 CAS: 101-76-8 HR: 2
BIS(p-CHLOROPHENYL)METHANE

mf: C₁₃H₁₀Cl₂ mw: 237.13

SYNS: DI-(p-CHLOROPHENYL)METHANE □ DI-(4-CHLOROPHENYL)METHANE □ METHANE, BIS(4-CHLOROPHENYL)-

TOXICITY DATA with REFERENCE:

orl-rat LD50:1 g/kg JPETAB 88,359,46
orl-mus LDLo:1500 mg/kg JPETAB 88,400,46

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of Cl⁻.

B1N000 CAS: 80-06-8 HR: 2
1,1-BIS(p-CHLOROPHENYL)METHYL-CARBINOL

mf: C₁₄H₁₂Cl₂O mw: 267.16

PROP: Crystals from pet ether. Mp: 68–69°.

SYNS: BCPE □ 1,1-BIS(p-CHLOROPHENYL)ETHANOL □ 1,1-BIS(4-CHLOROPHENYL)ETHANOL □ BIS(p-CHLOROPHENYL) METHYL CARBINOL □ 1,1-BIS(4-CHLOROPHENYL)-AETHANOL (GERMAN) □ CHLORFENETHOL □ DCPC □ DCPE □ DI-CHLORODIPHENYLETHANOL □ p,p'-DICHLORODIPHENYL METHYL CARBINOL □ 4,4'-DICHLORO(METHYLBENZ-HYDROL) □ 4,4'-DICHLORO-α-METHYLBENZHYDROL □ 4,4'-DICHLORO-α-METHYLBENZOHYDROL □ DI-(p-CHLORO-PHENYL) ETHANOL □ DI(p-CHLOROPHENYL) METHYL-CARBINOL □ DIMITO □ DMC □ ENT 9,624 □ QIKRON

TOXICITY DATA with REFERENCE:

orl-rat LD50:500 mg/kg ARSIM* 20,8,66
ipr-rat LD50:725 mg/kg OYAA2 2,148,68

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. A pesticide. When heated to decomposition it emits toxic fumes of Cl⁻.

B1N500 CAS: 117-27-1 HR: 2
1,1-BIS(p-CHLOROPHENYL)-2-NITROPROPANE

mf: C₁₅H₁₃Cl₂NO₂ mw: 310.19

SYNS: C.I. AZOIC DIAZO COMPONENT 37 □ CS 645A □ DNP □ ENT 22,784 □ 2-NITRO-1,1-BIS(p-CHLOROPHENYL)PROPANE □ 1,1'-(2-NITROPORPYLIDENE)BIS(4-CHLOROBENZENE) □ PROLAN □ PROLAN (CSC)

TOXICITY DATA with REFERENCE:

orl-rat LD50:750 mg/kg MEIEDD 10,946,83

SAFETY PROFILE: Moderately toxic by ingestion. An insecticide. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x. See also AROMATIC AMINES.

B1N750 CAS: 80-07-9 HR: 1
BIS(p-CHLOROPHENYL)SULFONE

mf: C₁₂H₈Cl₂O₂S mw: 287.16

PROP: Crystals. Mp: 148°.

TOXICITY DATA with REFERENCE:

orl-mus LD50:24 g/kg HCACAV 29,1317,46

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Mildly toxic by ingestion. See also SULFONATES. When heated to decomposition it emits very toxic fumes of Cl⁻ and SO_x.

B1N900 CAS: 3085-42-5 HR: 3

BIS(p-CHLOROPHENYL)SULFOXIDEmf: C₁₂H₈Cl₂OS mw: 271.16**SYNS:** 4,4-DICHLORODIPHENYL SULFOXIDE □ SULFOXIDE, BIS(p-CHLOROPHENYL)**TOXICITY DATA with REFERENCE:**

ipr-mus LD:>500 mg/kg CBCCT* 2,303,50

ivn-mus LD50:320 mg/kg CSLNX* NX#01241

SAFETY PROFILE: A poison by intravenous route. Moderately toxic by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.**BIO500 CAS: 55216-04-1 HR: 3
BIS(p-CHLOROPHENYLTHIO)DIMETHYLTIN**mf: C₁₄H₁₄Cl₂S₂Sn mw: 435.99**SYN:** BIS(p-CHLOROPHENYLTHIO)DIMETHYL STANNANE**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:56 mg/kg CSLNX* NX#01645

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)**ACGIH TLV:** TWA 0.1 mg(Sn)/m³; STEL 0.2mg(Sn)/m³ (skin).**NIOSH REL:** (Organotin Compounds) TWA 0.1mg(Sn)/m³**SAFETY PROFILE:** Poison by intravenous route. See also TIN COMPOUNDS. When heated to decomposition it emits very toxic fumes of Cl⁻ and SO_x.**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: Organotin Compounds 5504.**BIO625 CAS: 789-02-6 HR: 2
2,2-BIS(o,p-CHLOROPHENYL)-1,1,1-
TRICHLORO ETHANE**mf: C₁₄H₉Cl₅ mw: 354.48**SYNS:** o,p'-DDT □ 1,1,1-TRICHLORO-2-(o-CHLOROPHENYL)-2-(p-CHLOROPHENYL)ETHANE**TOXICITY DATA with REFERENCE:**

dns-rat-ipr 10 mg/kg JTEHD6 16,493,85

cyt-rat:oth 10 µg/L 34LXAP -555,76

orl-mus LDLo:1000 mg/kg JPETAB 88,400,46

ipr-mus LD50:1577 mg/kg BECTA6 11,359,74

CONSENSUS REPORTS: EPA Genetic Toxicology Program.**SAFETY PROFILE:** Moderately toxic by ingestion and intraperitoneal routes. An experimental teratogen. Other experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of Cl⁻. See also CHLORINATED HYDROCARBONS.**BIO750 CAS: 115-32-2 HR: 3
1,1-BIS(p-CHLOROPHENYL)-2,2,2-TRICHLORO-
ETHANOL**mf: C₁₄H₉Cl₅O mw: 370.48**PROP:** Solid. Mp: 78.5°. Material used in cancer bioassay was 40–60% pure NCITR* NCI-CG-TR-90,78.**SYNS:** ACARIN □ 1,1-BIS(CHLOROPHENYL)-2,2,2-TRICHLOROETHANOL □ 1,1-BIS(4-CHLOROPHENYL)-2,2,2-TRICHLOROETHANOL □ CARBAX □ CEKUDIFOL □ 4-CHLORO-α-(4-CHLOROPHENYL)-α-(TRICHLOROMETHYL) BENZENEMETHANOL □ CPCA □ DECOFOL □ DICHLORO KETHANE □ DI-(p-CHLOROPHENYL) TRICHLORO METHYLCARBINOL □ 4,4'-DICHLORO-α-(TRICHLORO-METHYL) BENZHYDROL □ DICOFOL □ DTMC □ ENT 23,648

□ FW 293 □ HIFOL □ Keltane □ p,p'-KELTHANE □ KELTHANE (DOT) □ KELTHANE DUST BASE □ KELTHANETHANOL □ MILBOL □ MITIGAN □ NCI-C00486 □ 2,2,2-TRICHLORO-1,1-BIS(4-CHLOROPHENYL)-ETHANOL (DUTCH) □ 1,1,1-TRICHLORO-2,2-BIS(4-CHLOROPHENYL)-AETHANOL (GERMAN) □ 2,2,2-TRICHLORO-1,1-BIS(4-CHLOROPHENYL)-AETHANOL (GERMAN) □ 2,2,2-TRICHLORO-1,1-BIS(4-CHLOROPHENYL)-ETHANOL (FRENCH) □ 2,2,2-TRICHLORO-1,1-BIS(4-CHLORO-FENIL)-ETANOLO (ITALIAN) □ 2,2,2-TRICHLORO-1,1-DI-(4-CHLOROPHENYL) ETHANOL

TOXICITY DATA with REFERENCE:

sce-hmn:lym 1 µmol/L ARTODN 52,221,83

orl-rat LD50:575 mg/kg WRPCA2 9,119,70

skn-rat LD50:100 mg/kg WRPCA2 9,119,70

ipr-rat LD50:1150 mg/kg TXAPA9 15,30,69

orl-mus LD50:420 mg/kg GTPZAB 19(9),55,75

orl-rbt LD50:1810 mg/kg TXAPA9 1,119,59

skn-rbt LD50:1870 mg/kg GUCHAZ 6,195,73

orl-gpg LD50:1810 mg/kg 85DPAN -,71/76

orl-ckn LD50:4365 mg/kg VETNAL 60(10),64,84

CONSENSUS REPORTS: IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 30,87,83. NCI Carcinogenesis Bioassay (feed); Clear Evidence: mouse NCITR* NCI-CG-TR-90,78; No Evidence: rat NCITR* NCI-CG-TR-90,78. Community Right-To-Know List.**SAFETY PROFILE:** Poison by ingestion and skin contact. Moderately toxic by intraperitoneal route. Human mutation data reported. Questionable carcinogen with experimental carcinogenic data. An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of Cl⁻.**BIP250 HR: 3
BIS-5-CHLORO TOLUENE DIAZONIUM ZINC
TETRACHLORIDE**mf: C₁₄H₁₂Cl₆N₄Zn mw: 514.37**CONSENSUS REPORTS:** Zinc and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** A shock-sensitive explosive. When heated to decomposition it emits toxic fumes of Cl⁻, NO_x, and ZnO. See also ZINC COMPOUNDS.**BIP500 CAS: 78371-84-3 HR: 3
1,3-BIS(6-CHLORO-o-TOLYL)-1-(2-(DIETHYL
AMINO)ETHYL)UREA HYDROCHLORIDE**mf: C₂₁H₂₇Cl₂N₃O•ClH mw: 444.87**SYN:** C 3183**TOXICITY DATA with REFERENCE:**

eye-rbt 2% MLD ARZNAD 8,664,58

ipr-rat LD50:65 mg/kg ARZNAD 8,664,58

scu-mus LD50:70 mg/kg ARZNAD 8,664,58

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. An eye irritant. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.**BIP750 CAS: 78371-85-4 HR: 3
1,3-BIS(6-CHLORO-o-TOLYL)-1-(2-PYRROLIDIN
YLETHYL)UREA HYDROCHLORIDE**mf: C₂₁H₂₅Cl₂N₃O•ClH mw: 442.85**SYN:** C 3218**TOXICITY DATA with REFERENCE:**

eye-rbt 2% MLD ARZNAD 8,664,58
 ipr-rat LD50:42 mg/kg ARZNAD 8,664,58
 scu-mus LD50:71 mg/kg ARZNAD 8,664,58

SAFETY PROFILE: Poison by intraperitoneal and subcutaneous routes. An eye irritant. When heated to decomposition it emits very toxic fumes of Cl^- , NO_x , and HCl .

BIQ250 CAS: 40334-69-8 HR: 3

BIS(2-CHLOROVINYL)CHLOROARSINE

mf: $\text{C}_4\text{H}_4\text{AsCl}_3$ mw: 233.35

SYNS: DICHLOROVINYLSARSINE CHLORIDE □

DICHLOROVINYLSARSINE (DOT) □ L-2 □ LEWISITE II

TOXICITY DATA with REFERENCE:

skn-gpg LD50:8 mg/kg JPBA7 58,411,46

scu-gpg LD50:200 $\mu\text{g}/\text{kg}$ JPBA7 58,411,46

CONSENSUS REPORTS: Arsenic and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.5 $\text{mg}(\text{As})/\text{m}^3$

DOT CLASSIFICATION: Forbidden

SAFETY PROFILE: A poison by skin contact and subcutaneous routes. When heated to decomposition it emits very toxic fumes of As and Cl^- . See also ARSENIC COMPOUNDS.

BIQ500 CAS: 111-94-4 HR: 3

BIS(β -CYANOETHYL)AMINE

mf: $\text{C}_6\text{H}_9\text{N}_3$ mw: 123.18

(NCC_2H_4) $_2\text{NH}$

PROP: Liquid. Mp: -5.5° , bp: 135° @ 1 mm, d: 1.463 @ 25° , vap d: 3.3.

SYNS: BBCE □ BIS-(2-CYANOETHYL)AMINE □ N,N-BIS-(2-CYANOETHYL)AMINE □ 2-CYANO-N-(2-CYANOETHYL)ETHANAMINE □ DI-(2-CYANOETHYL)AMMINA (ITALIAN) □ 2,2'-DICYANODIETHYLAMINE □ DI-(2-CYANOETHYL)AMINE □ IDPN □ 3,3'-IMINOBISPROPANENITRILE □ IMINO- β,β' -DIPROPIONITRILE □ β,β' -IMINODIPROPIONITRILE □ β,β' -IMINODIPROPIONITRILE □ 3,3'-IMINODIPROPIONITRILE □ 2341 I.S. □ USAF A-8564

TOXICITY DATA with REFERENCE:

skn-rbt 500 $\text{mg}/24\text{H}$ MLD 85JCAE -,924,86

eye-rbt 500 mg SEV AJOPAA 29,1363,46

eye-rbt 500 $\text{mg}/24\text{H}$ MLD 85JCAE -,924,86

orl-rat LD50:2700 mg/kg JIHTAB 31,60,49

ipr-mus LD50:200 mg/kg NTIS** AD277-689

skn-rbt LD50:2520 mg/kg AMIHBC 10,61,54

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Cyanide and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A poison by intraperitoneal route. Moderately toxic by ingestion and skin contact.

Experimental teratogenic and reproductive effects. A skin and severe eye irritant. A storage hazard, may explode in a sealed container. When heated to decomposition it emits toxic fumes of NO_x and CN^- . See also NITRILES and AMINES.

BIQ600 CAS: 66903-22-8 HR: 3

N,N-BIS(2-CYANOETHYL)-N-4-HYDROXY-1-ANTHRAQUINONYLSULFONILAMIDE

mf: $\text{C}_{26}\text{H}_{20}\text{N}_4\text{O}_5\text{S}$ mw: 500.56

SYN: 1-ANTHRACENESULFONAMIDE, 9,10-DIHYDRO-N-(4-(BIS(2-CYANOETHYL)AMINO)PHENYL)-D,10-DIOXO-4-HYDROXY-

TOXICITY DATA with REFERENCE:

ipr-mus LDLo:400 mg/kg NTIS** AD691-490

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of SO_x .

BIQ630 CAS: 68789-93-5 HR: 3

N,N'-BIS-(1-(2-CYANOETHYL)THIOACETALDEHYDE o-(N-METHYLCARBAMOYL)-OXIME) DISULFIDE

mf: $\text{C}_{14}\text{H}_{20}\text{N}_6\text{O}_4\text{S}_4$ mw: 464.64

SYNS: BIS(2-CYANOETHYL) N,N'-(DITHIOBIS((METHYLIMINO)CARBONYLOXY))DIETHANIMIDOTHIOATE □ ETHANIMIDOTHIOIC ACID, N,N'-(DITHIOBIS((METHYLIMINO)CARBONYLOXY))BIS-,BIS(2-CYANOETHYL)ESTER

TOXICITY DATA with REFERENCE:

orl-rat LD50:80 mg/kg GWXXBX #2813281

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BIQ660 CAS: 63942-43-8 HR: 3

N,N'-BIS(2-CYANO-2-METHYLPROPIONALDEHYDEO-(N-METHYLCARBAMOYL)-OXIME) SULFIDE

mf: $\text{C}_{14}\text{H}_{20}\text{N}_6\text{O}_4\text{S}$ mw: 368.46

SYN: 5,11-DIOXA-9-THIA-4,7,9,12-TETRAAZAPENTADEC-3,12-DIENEDINITRILE, 6,10-DIOXO-2,2,7,9,14,14-HEXAMETHYL-

TOXICITY DATA with REFERENCE:

orl-rat LD50:10 mg/kg USXXAM #4382957

SAFETY PROFILE: A poison by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BIR000 HR: 3

BIS(n-CYCLOOCTATETRAENE)URANIUM(O)

mf: $\text{C}_{16}\text{H}_{16}\text{U}$ mw: 446.33

SAFETY PROFILE: Ignites spontaneously in air. See also URANIUM.

BIR250 HR: 3

BIS(CYCLOPENTADIENYL)BIS(PENTA-FLUOROPHENYL)ZIRCONIUM

mf: $\text{C}_{22}\text{H}_{16}\text{F}_{10}\text{Zr}$ mw: 555.52

SAFETY PROFILE: Explodes in air (but not nitrogen) above its melting point (219°). When heated to decomposition it emits toxic fumes of F^- . See also ZIRCONIUM COMPOUNDS.

BIR500 CAS: 12194-11-5 HR: 3

BIS(CYCLOPENTADIENYL)CHROMIUM TRICARBONYL)MERCURY

mf: $\text{C}_{16}\text{H}_{10}\text{Cr}_2\text{HgO}_6$ mw: 602.85

PROP: Yellow crystals. Mp: $201-203^\circ$. IDLH 10 mg/m^3 (as Hg).

SYN: HEXACARBONYLDI-PI-CYCLOPENTADIENYL-MU-MERCURIODI CHROMIUM

TOXICITY DATA with REFERENCE:

ivn-mus LD50:56 mg/kg CSLNX* NX#04754

CONSENSUS REPORTS: Mercury and its compounds, as well as chromium and its compounds, are on the Community Right-To-Know List.

NIOSH REL: (Organomercury): TWA 0.01 mg/m³; STEL 0.03 mg/m³ (skin)

SAFETY PROFILE: Poison by intravenous route. See also CHROMIUM COMPOUNDS, MERCURY COMPOUNDS, and CARBONYLS. When heated to decomposition it emits toxic fumes of Hg.

BIR529 CAS: 1277-43-6 HR: 3

BIS(CYCLOPENTADIENYL)COBALT

mf: C₁₀H₁₀Co mw: 189.13

PROP: Very air-sensitive, black-purple crystals. Mp: 173–174°.

SYNS: COBALTOCENE □ DICYCLOPENTADIENYLCOBALT

TOXICITY DATA with REFERENCE:

mmo-sat 3333 µg/plate EMMUEG 19(Suppl 21),2,92

ipr-rat LD50:55 mg/kg NCIUS* PH 43-64-886,JAN,65

ipr-mus LD50:80 mg/kg NCIUS* PH 43-64-886,JAN,65

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Cobalt and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Poison by intraperitoneal route. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and fumes. See also COBALT.

BIR750 HR: 3

BIS(n-CYCLOPENTADIENYL)MAGNESIUM

mf: C₁₀H₁₀Mg mw: 154.41

SAFETY PROFILE: Ignites spontaneously in air. When heated to decomposition it emits acrid smoke and fumes. See also MAGNESIUM COMPOUNDS.

BIS200 CAS: 15131-55-2 HR: 2

BIS(2-CYCLOPENTENYL)ETHER

mf: C₁₀H₁₄O mw: 150.24

TOXICITY DATA with REFERENCE:

orl-rat LD50:11,300 mg/kg AIHAAP 30,470,69

skn-rbt LD50:1590 mg/kg AIHAAP 30,470,69

SAFETY PROFILE: Moderately toxic by skin contact. Mildly toxic by ingestion. See also ETHERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BIS250 CAS: 38780-36-8 HR: 2
cis-BIS(CYCLOPENTYLAMINE)PLATINUM(II)

mf: C₁₀H₂₂Cl₂N₂Pt mw: 436.33

PROP: IDLH 4 mg/m³ (as Pt).

SYNS: cis-DICHLOROBIS(CYCLOPENTYLAMINE) PLATINUM(II) □ cis-DICYCLOPENTYLAMINEDICHLORO PLATINUM(II)

TOXICITY DATA with REFERENCE:

mma-sat 10 µg/plate MUREAV 95,79,82

dni-ham:ovr 26 mg/L CBINA8 14,217,76

ipr-mus LD50:480 mg/kg CBINA8 11,145,75

SAFETY PROFILE: Moderately toxic by intraperitoneal route. Questionable carcinogen with

experimental carcinogenic data. Mutation data reported. See also PLATINUM COMPOUNDS. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BIS300 CAS: 12550-82-2 HR: 3

BIS(l-CYSTEINATO)MERCURY

mf: C₆H₁₂HgN₂O₄S₂ mw: 440.91

PROP: IDLH 10 mg/m³ (as Hg).

SYNS: CYSTEINE, l-, MERCURY COMPLEX □ MERCURY(II), BIS(l-CYSTEINATO)- □ MERCURATE(2-), BIS(l-CYSTEINATO(2-)-O,S)-, DIHYDROGEN, (T-4)-

TOXICITY DATA with REFERENCE:

orl-mus LD50:>600 mg/kg JEPTDQ 2(6),1529,1979

ivn-mus LD50:8400 µg/kg JEPTDQ 2(6),1529,1979

ACGIH TLV: TWA 0.01. STEL 0.03 mg/m³ (skin)

NIOSH REL: (MERCURY, ORGANO) TWA 0.01 mg/m³. STEL 0.03 mg/m³ (Sk)

SAFETY PROFILE: A poison by intravenous route. Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO_x, Hg, and SO_x.

BIS500 CAS: 3465-75-6 HR: 3

BIS(DECANOYLOXY)DI-n-BUTYLSTANNANE

mf: C₂₈H₅₆O₄Sn mw: 575.53

SYN: BIS(DECANOYLOXY)DI-n-BUTYLTIN

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H SEV 28ZPAK -,229,72

eye-rbt 100 mg/24H MOD 28ZPAK -,229,72

orl-rat LD50:153 mg/kg 28ZPAK -,229,72

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)

ACGIH TLV: TWA 0.1 mg(Sn)/m³; STEL 0.2 mg(Sn)/m³ (skin).

NIOSH REL: (Organotin Compounds) TWA 0.1 mg(Sn)/m³

SAFETY PROFILE: Poison by ingestion. A severe skin and eye irritant. See also TIN COMPOUNDS. When heated to decomposition it emits acrid and irritant fumes.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

BIS750 CAS: 15372-34-6 HR: D

di-cis-BISDEHYDRODOISYNOLIC ACID METHYL ETHER

mf: C₁₉H₂₂O₃ mw: 298.41

SYNS: DOISYNOESTROL □ FENOCICLINA □ FENOCYCLIN □ FENOCYCLINE □ FENOCYLIN □ 3-METHOXY-16,17-SECOESTRA-1,3,5(10),6,8-PENTAEN-17-OIC ACID □ PHENO CYCLIN □ RS 2874 □ SURESTRINE □ SURESTRYLDOISYNO-ESTROL □ FENOCICLINA □ FENOCYCLIN □ FENOCYCLINE □ FENOCYLIN □ 3-METHOXY-16,17-SECOESTRA-1,3,5(10),6,8-PENTAEN-17-OIC ACID □ PHENOCYCLIN □ RS 2874 □ SURESTRINE □ SURESTRYL

SAFETY PROFILE: Experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating fumes.

BIT000 CAS: 5684-13-9 HR: 2
BISDEHYDROISYNOLIC ACID METHYL ESTER

mf: C₁₉H₂₂O₃ mw: 298.41

SYNS: DEHYDROFOLLICULINIC ACID □ DOISYNOESTROL □ 1-ETHYL-2-METHYL-7-METHOXY-1,2,3,4-TETRAHYDRO

PHENANTHRYL-2-CARBOXYLIC ACID □ FENOCYCLIN □
FENOCYCLINE □ 7-METHYLBISDEHYDRODOISYNOLIC ACID
□ METILESTER del ACIDO BISDEHIDRODOISYNOLICO (SPANISH)
□ 16,17-SECO-13- α -ESTRA-1,3,5,6,7,9-PENTAEN-17-OIC ACID,
METHYL ESTER □ SURESTRINE □ SURESTRYL □ TETRA
DEHYDRODOISYNOLIC ACID METHYL ETHER

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Experimental reproductive effects. See also ETHERS and ESTERS. When heated to decomposition it emits acrid smoke and irritating fumes.

BIT030 HR: 2
BISDEHYDRODOISYNOLIC ACID 7-METHYL ETHER

mf: $C_{19}H_{22}O_3$ mw: 298.41

SYNS: 7-METILETER del ACIDO BISDEHIDRODOISYNOLICO
□ 16,17-SECOESTRA-1,3,5(10),6,8-PENTAEN-17-OIC ACID, 3-METHOXY-

TOXICITY DATA with REFERENCE:

imp-gpg TDLo:21 mg/kg:ETA,REP BSBSAS 8,142,51

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x .

BIT250 CAS: 37333-40-7 HR: 3
BIS(DIALKYLPHOSPHINOTHIOYL)DISULFIDE

mf: $C_{11}H_{26}O_4P_2S_4 \cdot C_9H_{22}O_4P_2S_4$ mw: 797.04

SYNS: BIO 1,137 □ ENT 23,584 □ NIAGARA 1,137 □ PHOSTEX

TOXICITY DATA with REFERENCE:

orl-rat LD50:265 mg/kg TXAPA9 14,515,69

skn-rat LD50:480 mg/kg TXAPA9 14,515,69

SAFETY PROFILE: Poison by ingestion. Moderately toxic by skin contact. When heated to decomposition it emits very toxic fumes of SO_x and PO_x .

BIT350 CAS: 55870-36-5 HR: 3
BIS(1,2-DIAMINOETHANE)DIAQUACOBALT(III) PERCHLORATE

mf: $C_4H_{20}Cl_3CoN_4O_{14}$ mw: 514.51
 $((C_2H_8N_2)_2Co(H_2O)_2)(ClO_4)_3$

PROP: Only observed in soln. Sol in H_2O .

CONSENSUS REPORTS: Cobalt and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: The dry perchlorate is violently explosive. Upon decomposition it emits toxic fumes of Cl^- and NO_x . See also COBALT COMPOUNDS and PERCHLORATES.

BIT500 CAS: 26388-78-3 HR: 3
BIS-1,2-DIAMINO ETHANE DICHLORO COBALT(III) CHLORATE

mf: $C_4H_{16}Cl_3CoN_4O_3$ mw: 333.49
 $((C_2H_8N_2)_2CoCl_2)ClO_3$

CONSENSUS REPORTS: Cobalt and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Explodes when heated to 320°C. When heated to decomposition it emits toxic fumes of Cl^- and NO_x . See also COBALT COMPOUNDS and CHLORATES.

BIT750 CAS: 14932-06-0 HR: 3
BIS-1,2-DIAMINO ETHANE DICHLORO COBALT (III) PERCHLORATE

mf: $C_4H_{16}Cl_3CoN_4O_4$ mw: 317.49
 $((C_2H_8N_2)_2CoCl_2)ClO_4$

CONSENSUS REPORTS: Cobalt and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: The perchlorate has low impact sensitivity but explodes when heated to 300°C. When heated to decomposition it emits toxic fumes of Cl^- and NO_x . See also COBALT COMPOUNDS and PERCHLORATES.

BIU000 HR: 3
cis-BIS-1,2-DIAMINO ETHANE DINITRO COBALT(III) IODATE

mf: $C_4H_{16}CoIN_6O_7$ mw: 446.04

CONSENSUS REPORTS: Cobalt and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Explodes on heating. When heated to decomposition it emits toxic fumes of I^- and NO_x . See also COBALT COMPOUNDS.

BIU125 CAS: 14781-32-9 HR: 3
BIS(1,2-DIAMINOETHANE)DINITROCOBALT(III) PERCHLORATE

mf: $C_4H_{16}ClCoN_6O_8$ mw: 370.59
 $((C_2H_8N_2)_2Co(NO_2)_2)ClO_4$

CONSENSUS REPORTS: Cobalt and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: A dangerous explosive. Upon decomposition it emits toxic fumes of Cl^- and NO_x . See also COBALT COMPOUNDS, PERCHLORATES, and EXPLOSIVES.

BIU250 HR: 3
BIS(1,2-DIAMINO ETHANE)HYDROXOOXO RHENIUM(V) DIPERCHLORATE

mf: $C_4H_{17}Cl_2N_4O_{10}Re$ mw: 538.30

SAFETY PROFILE: Explodes violently when dried at above room temperature. Shock sensitive. When heated to decomposition it emits toxic fumes of Cl^- and NO_x . See also RHENIUM and PERCHLORATES.

BIU260 CAS: 19267-68-6 HR: 3
BIS(1,2-DIAMINOETHANE)HYDROXOOXO-RHENIUM(V) PERCHLORATE

mf: $C_4H_{17}Cl_2N_4O_{10}Re$ mw: 538.31
 $((C_2H_8N_2)_2Re(OH)O)(ClO_4)_2$

SAFETY PROFILE: A heat- and shock-sensitive explosive. Upon decomposition it emits toxic fumes of Cl^- and NO_x . See also RHENIUM and PERCHLORATES.

BIU500 HR: 3
BIS-1,2-DIAMINO PROPANE-cis-DICHLORO CHROMIUM(III) PERCHLORATE

mf: $C_6H_{20}Cl_3CrN_4O_4$ mw: 370.61
 $((C_3H_{10}N_2)_2CrCl_2)ClO_4$

PROP: IDLH 25 mg/m³ [as Cr(III)].

CONSENSUS REPORTS: Chromium and its compounds are on the Community Right-To-Know List.
SAFETY PROFILE: Mixture with concentrated perchloric acid explodes violently. When heated to decomposition it emits toxic fumes of Cl^- and NO_x . See CHROMIUM COMPOUNDS and PERCHLORATES.

BIU600 CAS: 88-38-0 HR: 2
4,4'-BIS((4,6-DIANILINO-s-TRIAZIN-2-YL)-AMINO)-2,2'-STILBENEDISULFONIC ACID

mf: $\text{C}_{44}\text{H}_{36}\text{N}_{12}\text{O}_6\text{S}_2$ mw: 893.04

SYNS: BELOTEX PAD □ BENZENESULFONIC ACID, 2,2'-(1,2-ETHENEDIYL)BIS(5-((4,6-BIS(PHENYLAMINO)-1,3,5-TRIAZIN-2-YL)AMINO)-

TOXICITY DATA with REFERENCE:

orl-rat LD50: >10 g/kg KHZDAN 29(2),24,86

skn-rat LD50: >3 g/kg KHZDAN 29(2),24,86

SAFETY PROFILE: Moderately toxic by skin contact. Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of NO_x and SO_x .

BIU750 CAS: 1448-16-4 HR: D
1,8-BIS(DIAZO)-2,7-OCTANEDIONE

mf: $\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$ mw: 194.22

SYNS: BIS(DIAZOACETYL)BUTANE □ 1,4-BIS(DIAZOACETYL)BUTANE □ DAB

TOXICITY DATA with REFERENCE:

mno-esc 60 nmol/L SOGEBZ 10,81,74

slt-dmg-orl 170 mmol/L SOGEBZ 17,468,81

dlt-dmg-orl 170 mmol/L SOGEBZ 17,468,81

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic fumes of NO_x .

BIU900 HR: 3
BIS(DI-n-BENZENE CHROMIUM(IV)) DICHROMATE

mf: $\text{C}_{24}\text{H}_{24}\text{Cr}_4\text{O}_7$ mw: 632.44

CONSENSUS REPORTS: Chromium and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: An explosive catalyst. Upon decomposition it emits acrid smoke and fumes. See also CHROMIUM COMPOUNDS.

BIV000 CAS: 58451-87-9 HR: 2
2,6-BIS-(DIBENZYLHYDROXYMETHYL)-PIPERIDINE

mf: $\text{C}_{35}\text{H}_{39}\text{NO}_2$ mw: 505.75

SYNS: 2,6-BIS-(DWUBENZYLOHYDROKSYMETYLO)-PIPERYDINA (POLISH) □ $\alpha,\alpha,\alpha',\alpha'$ -TETRAKIS(PHENYL-METHYL)-2,6-PIPERIDINEDIMETHANOL

TOXICITY DATA with REFERENCE:

orl-mus LD50: 5000 mg/kg PJPPAA 27,549,75

ipr-mus LD50: 3125 mg/kg PJPPAA 27,549,75

SAFETY PROFILE: Moderately toxic by intraperitoneal route. Mildly toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x .

BIV500 CAS: 3072-84-2 HR: 1
2,2-BIS(3,5-DIBROMO-4-(2,3-EPOXYPROPOXY)

PHENYL)PROPANE

mf: $\text{C}_{21}\text{H}_{24}\text{Br}_4\text{O}_4$ mw: 660.09

SYN: 2,2-BIS-(3',5'-DIBROM-4'-GLYCIDOXYFENYL)PROPAN (CZECH)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,137,72

eye-rbt 500 mg/24H MOD 28ZPAK -,137,72

orl-rat LD50: 7160 mg/kg 28ZPAK -,137,72

SAFETY PROFILE: Mildly toxic by ingestion. A skin and eye irritant. When heated to decomposition it emits toxic fumes of Br^- .

BIV825 CAS: 5412-25-9 HR: D
BIS(2,3-DIBROMOPROPYL)PHOSPHATE

mf: $\text{C}_6\text{H}_{11}\text{Br}_4\text{O}_4\text{P}$ mw: 497.78

SYNS: BIS-BP □ 2,3-DIBROMO-1-PROPANOL HYDROGEN PHOSPHATE

TOXICITY DATA with REFERENCE:

mno-sat 50 μmol /plate APTOA6 51,76,72

mma-sat 25 nmol/plate TXAPA9 63,105,82

msc-ham:lng 20 μmol /L MUREAV 124,213,83

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Mutation data reported. When heated to decomposition it emits toxic fumes of Br^- and PO_x .

BIV900 CAS: 73926-85-9 HR: 3
BIS(DIBUTYLAMMONIUM)HEXACHLOROSTANNATE

mf: $\text{C}_{16}\text{H}_{40}\text{N}_2\cdot\text{Cl}_6\text{Sn}$ mw: 591.97

SYNS: AMMONIUMYL, DIBUTYL-, HEXACHLOROSTANNATE(2-) (2:1) □ DIBUTYLAMINE, HEXACHLOROSTANNANE (2:1)

TOXICITY DATA with REFERENCE:

ivn-mus LD50: 56 mg/kg CSLNX* NX#06251

OSHA PEL: TWA 2 mg(Sn)/ m^3

ACGIH TLV: TWA 2 mg(Sn)/ m^3

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits toxic fumes of NO_x , Sn, and Cl^- .

BIW000 HR: 3
BIS(DIBUTYLBORINO)ACETYLENE

mf: $\text{C}_{18}\text{H}_{36}\text{B}_2$ mw: 468.71

SAFETY PROFILE: Ignites spontaneously in air. When heated to decomposition it emits acrid smoke and fumes. See also BORON COMPOUNDS and ACETYLENE COMPOUNDS.

BIW250 CAS: 64653-03-8 HR: 3
BIS(DIBUTYLDITHIOCARBAMATO)DIBENZYLSTANNANE

mf: $\text{C}_{32}\text{H}_{50}\text{N}_2\text{S}_4\text{Sn}$ mw: 709.77

SYNS: BIS((DIBUTYLDITHIOCARBAMOYL)OXY)DIBENZYLSTANNANE □ DIBENZYLSTANNANE BIS(DIBUTYLDITHIOCARBAMATE)

TOXICITY DATA with REFERENCE:

ivn-mus LD50: 180 mg/kg CSLNX* NX#02082

OSHA PEL: TWA 0.1 mg(Sn)/ m^3 (skin)

ACGIH TLV: TWA 0.1 mg(Sn)/ m^3 ; STEL 0.2 mg(Sn)/ m^3 (skin).

NIOSH REL: (Organotin Compounds) TWA 0.1 mg(Sn)/m³

SAFETY PROFILE: Poison by intravenous route. See also CARBAMATES and TIN COMPOUNDS. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

BIW500 CAS: 66009-08-3 HR: 3
BIS(DIBUTYLDITHIOCARBAMATO)DIMETHYLSTANNANE

mf: C₂₀H₄₂N₂S₄Sn mw: 557.57

SYNS: BIS((DIBUTYLDITHIOCARBAMOYL)OXY)DIMETHYLSTANNANE □ DIMETHYLTIN BIS(DIBUTYLDITHIOCARBAMATE)

TOXICITY DATA with REFERENCE:

ivn-mus LD50:180 mg/kg CSLNX* NX#02075

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)

ACGIH TLV: TWA 0.1 mg(Sn)/m³; STEL 0.2 mg(Sn)/m³ (skin).

NIOSH REL: (Organotin Compounds) TWA 0.1 mg(Sn)/m³

SAFETY PROFILE: Poison by intravenous route. See also CARBAMATES and TIN COMPOUNDS. When heated to decomposition it emits very toxic fumes of NO_x and SO_x.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

BIW750 CAS: 13927-77-0 HR: 3
BIS(DIBUTYLDITHIOCARBAMATO)NICKEL

mf: C₁₈H₃₆N₂S₄•Ni mw: 467.51

PROP: Green crystals from C₆H₆/EtOH. Mp: 91°. Sol in C₆H₆, Me₂CO.

SYNS: DIBUTYLDITHIOCARBAMIC ACID, NICKEL SALT □ NICKEL DIBUTYLDITHIOCARBAMATE □ UV CHEK AM 104 □ VANGUARD N

TOXICITY DATA with REFERENCE:

orl-rat LD50:17 g/kg IPSTB3 3,93,76

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. Reported in EPA TSCA Inventory. Nickel and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Low toxicity by ingestion. Confirmed human carcinogen with experimental tumorigenic data. See also NICKEL COMPOUNDS and CARBAMATES. When heated to decomposition it emits very toxic fumes of SO_x and NO_x.

BIW000 CAS: 136-23-2 HR: 3
BIS(DIBUTYLDITHIOCARBAMATO)ZINC

mf: C₁₈H₃₈N₂S₄Zn mw: 476.19

PROP: White powder. Mp: 104–108°, d: 1.24 @ 20°/20°.

SYNS: ACETO ZDBD □ BUTAZATE □ BUTAZATE 50-D □ BUTYL ZIMATE □ BUTYL ZIRAM □ DIBUTYLDITHIOCARBAMIC ACID ZINC COMPLEX □ DIBUTYLDITHIOCARBAMIC ACID ZINC SALT □ USAF GY-5 □ VULCACURE □ VULKACIT LDB/C □ ZINC-BIBUTYLDITHIOCARBAMATE □

ZINC-DIBUTYLDITHIOCARBAMATE □ ZINC-N,N-DIBUTYLDITHIOCARBAMATE

TOXICITY DATA with REFERENCE:

ipr-mus LD50:100 mg/kg NTIS** AD277-689

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Zinc and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Poison by intraperitoneal route. Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits very toxic fumes of NO_x, ZnO, and SO_x. See also ZINC COMPOUNDS and CARBAMATES.

BIX125 CAS: 16054-41-4 HR: D
BIS(DICHLOROACETYL)DIAMINE

mf: C₄H₄Cl₄N₂O₂ mw: 253.90

SYN: 1,2-BIS(DICHLOROACETYL)HYDRAZINE

SAFETY PROFILE: An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic fumes of Cl⁻.

BIX250 CAS: 1477-57-2 HR: 3
N,N'-BIS(DICHLOROACETYL)-1,8-DIAMINOCTANE

mf: C₁₂H₂₀Cl₄N₂O₂ mw: 366.14

SYNS: N,N'-BIS(DICHLOROACETYL)-1,8-OCTAMETHYLENE DIAMINE □ FERTILYSIN □ N,N'-OCTAMETHYLENEBIS(2,2-DICHLOROACTAMIDE) □ R-010-TK □ WIN 18,441 □ WIN 18,446

TOXICITY DATA with REFERENCE:

spm-hmn-orl 1150 mg/kg/23W TXAPA9 3,1,61

mnt-mus:oth 500 mg/kg NKEZA4 33,165,86

orl-man TDLo:943 mg/kg/50D:GIT 15QWAW -,93,65

ipr-mus LDLo:150 mg/kg TXAPA9 23,288,72

CONSENSUS REPORTS: EPA Genetic Toxicology Program.

SAFETY PROFILE: Poison by intraperitoneal route. Human systemic effects by ingestion: nausea and vomiting. Human reproductive effects by ingestion: changes in spermatogenesis. An experimental teratogen. Other experimental reproductive effects. Human mutation data reported. When heated to decomposition it emits very toxic fumes of Cl⁻ and NO_x.

BIX500 CAS: 15442-77-0 HR: 3
BIS(3,4-DICHLOROBENZOATO)NICKEL

mf: C₁₄H₆Cl₄NiO₄ mw: 438.71

TOXICITY DATA with REFERENCE:

ivn-mus LD50:100 mg/kg CSLNX* NX#03268

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. Nickel and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 0.1 mg (Ni)/m³

ACGIH TLV: TWA 0.2 mg(Ni)/m³; Human Carcinogen)

NIOSH REL: (Inorganic Nickel) TWA 0.015 mg(Ni)/m³

SAFETY PROFILE: Confirmed human carcinogen. Poison by intravenous route. See also NICKEL COMPOUNDS and CHLORIDES. When heated to decomposition it emits toxic fumes of Cl⁻.

BJK560 CAS: 30947-30-9 HR: 3
((3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXY

**PHENYL)METHYL)PHOSPHONIC ACID,
MONOETHYL ESTER, NICKEL(2+) SALT
(2:1)**mf: C₃₄H₅₆O₈P₂•Ni mw: 713.55

SYNS: IRGASTAB 2002 □ IRGASTAB 2002 HT

TOXICITY DATA with REFERENCE:

orl-rat LD50:3750 mg/kg NTIS** OTS0539888

orl-mus LD50:965 mg/kg NTIS** OTS0539846

CONSENSUS REPORTS: NTP 10th Report on Carcinogens.**SAFETY PROFILE:** Confirmed human carcinogen. Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of PO_x and Ni.**BIX750 CAS: 133-14-2 HR: 3
BIS(2,4-DICHLOROBENZOYL)PEROXIDE**mf: C₁₄H₆Cl₄O₄ mw: 380.00

SYNS: CADOX TS □ CADOX TS 40,50 □ DI-2,4-DICHLORO BENZOYL PEROXIDE, >75% with water (DOT) □ LUPERCO CST

TOXICITY DATA with REFERENCE:

ipr-mus LD50:225 mg/kg IPSTB3 3,93,76

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**DOT CLASSIFICATION:** Forbidden**SAFETY PROFILE:** Poison by intraperitoneal route. Explosion Hazard: Pure compound is extremely shock sensitive and decomposes rapidly @ 80°. When heated to decomposition it emits toxic fumes of Cl⁻. See also PEROXIDES, ORGANIC; and ESTERS.**BIY000 CAS: 2589-02-8 HR: 2
2,2-BIS(3,5-DICHLORO-4-(2,3-EPOXYPROPO-
XY) PHENYL)PROPANE**mf: C₂₁H₂₄Cl₄O₄ mw: 482.25

SYN: 2,2-BIS-(3',5'-DICHLOR-4'-GLYCIDOXYFENYL)PROPAN (CZECH)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MOD 28ZPAK -,137,72

eye-rbt 500 mg/24H MOD 28ZPAK -,137,72

SAFETY PROFILE: A skin and eye irritant. When heated to decomposition it emits toxic fumes of Cl⁻.**BIY250 CAS: 19721-74-5 HR: 3
BIS(1,2-DICHLOROETHYL)SULFONE**mf: C₄H₆Cl₄O₂S mw: 259.96**TOXICITY DATA with REFERENCE:**

orl-rat LD50:250 mg/kg AIHAAP 30,470,69

skn-rbt LD50:1000 mg/kg AIHAAP 30,470,69

SAFETY PROFILE: Poison by ingestion. Moderately toxic by skin contact. See also SULFONATES. When heated to decomposition it emits very toxic fumes of Cl⁻ and SO_x.**BIY300 CAS: 222420-34-0 HR: 3
2,7-BIS(3,4-DICHLOROPHENYL)BENZO(lmn)-
(3,8)PHENANTHROLINE-1,3,6,8(2H,7H)-
TETRONE**mf: C₂₆H₁₀Cl₄N₂O₄ mw: 556.19**TOXICITY DATA with REFERENCE:**

ipr-mus TDLo:0.61 mg/kg FRMCE8 55,319,2000

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.**BIY500 HR: 3
BIS(1,3-DICHLORO-1,1,3,3-TETRAETHYL
DISTANNOXANE)**mf: C₁₆H₄₀Cl₄O₂•2Sn mw: 643.72

SYN: DI-o-(CHLORODIETHYLSTANNYLOXO)BIS(CHLORO-DIETHYLTIN)

TOXICITY DATA with REFERENCE:

ivn-mus LD50:22 mg/kg CSLNX* NX#03157

OSHA PEL: TWA 0.1 mg(Sn)/m³ (skin)**ACGIH TLV:** TWA 0.1 mg(Sn)/m³; STEL 0.2 mg(Sn)/m³ (skin).**NIOSH REL:** (Organotin Compounds) TWA 0.1 mg(Sn)/m³**SAFETY PROFILE:** Poison by intravenous route. See also TIN COMPOUNDS and CHLORIDES. When heated to decomposition it emits toxic fumes of Cl⁻.**BIY600 CAS: 1518-15-6 HR: 3
1,4-BIS(DICYANOMETHYLENE)CYCLOHEXANE**mf: C₁₂H₈N₄ mw: 208.24

SYN: Δ1-α-4-α'-CYCLOHEXANEDIMALONONITRILE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:56 mg/kg CSLNX* NX#05268

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intravenous route. When heated to decomposition it emits toxic vapors of NO_x.**BIZ000 HR: 3
1,3-BIS(DI-n-CYCLOPENTADIENYL IRON)-2-
PROPEN-1-ONE**mf: C₂₃H₂₀Fe₂O mw: 324.11**SAFETY PROFILE:** The dry material is a powerful explosive and detonator. Incompatible with perchloric acid; acetic anhydride; ether; methanol.**BJA000 CAS: 73771-52-5 HR: 1
1,5-BIS(4-(2,3-DIDEHYDROTRIAZIRIDINYL)
PHENYL)-1,4-PENTADIEN-3-ONE**mf: C₁₇H₁₂N₆O mw: 316.35

SYN: DIAZIDODIBENZALACETON (CZECH)

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,123,72

eye-rbt 500 mg/24H MLD 28ZPAK -,123,72

SAFETY PROFILE: A skin and eye irritant. See also KETONES. When heated to decomposition it emits toxic fumes of NO_x.**BJA200 CAS: 90466-79-8 HR: 3
BIS(2,2-DIETHOXYETHYL)DISELENIDE**mf: C₁₂H₂₆O₄Se₂ mw: 392.30

SYN: DISELENIDE, BIS(2,2-DIETHOXYETHYL)-

TOXICITY DATA with REFERENCE:

ivn-mus LD50:1800 µg/kg CSLNX* NX#09262

OSHA PEL: TWA 0.2 mg(Se)/m³**ACGIH TLV:** TWA 0.2 mg(Se)/m³

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits toxic fumes of Se.

BJA250 CAS: 105-18-0 HR: 3
1,4-BIS(DIETHYLAMINO)-2-BUTYNE

mf: $C_{12}H_{24}N_2$ mw: 196.38

SYNS: 2-BUTYNYLENEDIAMINE, N,N,N',N'-TETRAETHYL- □ N,N,N',N'-TETRAETHYL-2-BUTYNYLENEDIAMINE

TOXICITY DATA with REFERENCE:

ivn-mus LD50:56 mg/kg CSLNX* NX#04930

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits toxic vapors of NO_x .

BJA500 CAS: 35697-34-8 HR: 3
2,6-BIS(2-(DIETHYLAMINO)ETHOXY)-9,10-ANTHRACENEDIONE DIHYDROCHLORIDE

mf: $C_{26}H_{34}N_2O_4 \cdot 2ClH$ mw: 511.54

SYN: RMI 10024DA

TOXICITY DATA with REFERENCE:

orl-mus LD50:1560 mg/kg ALACBI 12,77,79

scu-mus LD50:110 mg/kg ALACBI 12,77,79

SAFETY PROFILE: Poison by subcutaneous route. Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x and HCl.

BJA750 CAS: 57665-49-3 HR: 2
1-(BIS(2-(DIETHYLAMINO)ETHYL)AMINO)-5-CHLORO-3-(p-CHLOROPHENYL)INDOLE DIHYDROCHLORIDE HEMIHYDRATE

mf: $C_{26}H_{36}Cl_2N_4 \cdot 2ClH \cdot 1/2H_2O$ mw: 557.49

TOXICITY DATA with REFERENCE:

orl-rat LD50:780 mg/kg ARZNAD 30,919,80

orl-mus LD50:870 mg/kg ARZNAD 30,919,80

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BJA809 CAS: 57647-13-9 HR: 2
1-(BIS(2-(DIETHYLAMINO)ETHYL)AMINO)-3-PHENYLINDOLE DIHYDROCHLORIDE

mf: $C_{26}H_{38}N_4 \cdot 2ClH$ mw: 479.1

TOXICITY DATA with REFERENCE:

orl-rat LD50:800 mg/kg ARZNAD 30,919,80

orl-mus LD50:540 mg/kg ARZNAD 30,919,80

SAFETY PROFILE: Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of Cl^- and NO_x .

BJA825 CAS: 3572-35-8 HR: 3
3,6-BIS(3-DIETHYLAMINOPROPOXY)PYRIDAZINE BISMETHIODIDE

mf: $C_{20}H_{40}N_4O_2 \cdot 2I$ mw: 622.44

SYNS: 3,3'-(3,6-PYRIDAZINEDIYL)BIS(OXY)BIS(N,N-DIETHYL-N-METHYL-1-PROPANAMINIUM)) DIODIDE (9CI) □ (3,6-PYRIDAZINEDIYL)BIS(OXYTRIMETHYLENE))BIS(DIETHYL-METHYLAMMONIUM IODIDE) □ WIN 4981

TOXICITY DATA with REFERENCE:

orl-mus LD50:49 mg/kg JPETAB 118,395,56

ivn-mus LD50:610 µg/kg JPETAB 125,323,59

orl-cat LD50:5 mg/kg JPETAB 118,395,56

ivn-cat LD50:500 µg/kg JPETAB 118,395,56

ivn-rbt LD50:400 µg/kg JPETAB 118,395,56

SAFETY PROFILE: Poison by ingestion and intravenous routes. When heated to decomposition it emits toxic fumes of I^- , NO_x , and NH_3 .

BJB500 CAS: 14239-68-0 HR: 3
BIS(DIETHYLDITHIOCARBAMATO)CADMIUM

mf: $C_{10}H_{20}CdN_2S_4$ mw: 408.96

SYNS: CADMIUM DIETHYL DITHIOCARBAMATE □ ETHYL CADMATE □ ETHYL TUADS

TOXICITY DATA with REFERENCE:

mno-sat 10 µg/plate MUREAV 68,313,79

dnd-esc 1 µmol/L ARTODN 46,277,80

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Cadmium and its compounds are on the Community Right-To-Know List.

OSHA PEL: TWA 5 µg(Cd)/m³

ACGIH TLV: TWA 0.002 mg(Cd)/m³ (respirable dust), Suspected Human Carcinogen); BEI: 5 µg/g creatinine in urine; 5 µg/L in blood

DFG MAK: DFG BAT: Blood 1.5 µg/dL; Urine 15 µg/dL, Suspected Carcinogen

NIOSH REL: (Cadmium) Reduce to lowest feasible level

SAFETY PROFILE: Confirmed human carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits very toxic fumes of NO_x and SO_x . See also CADMIUM COMPOUNDS and CARBAMATES.

BJB750 CAS: 14239-51-1 HR: 3
BIS(DIETHYLDITHIOCARBAMATO)MERCURY

mf: $C_{10}H_{20}HgN_2S_4$ mw: 497.15

PROP: Yellow crystals from Me_2CO . Mp: 127–130°.

IDLH 10 mg/m³ (as Hg).

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:100 mg/kg NCNSA6 5,30,53

ivn-mus LD50:18 mg/kg CSLNX* NX#02505

CONSENSUS REPORTS: Mercury and its compounds are on the Community Right-To-Know List.

OSHA PEL: CL 0.1 mg(Hg)/m³ (skin)

ACGIH TLV: TWA 0.1 mg(Hg)/m³ (skin); BEI: 35 µg/g creatinine total inorganic mercury in urine preshift; 15 µg/g creatinine total inorganic mercury in blood at end of shift at end of workweek.

DFG MAK: Confirmed Animal Carcinogen with Unknown Relevance to Humans

NIOSH REL: (Organomercury): TWA 0.01 mg/m³; STEL 0.03 mg/m³ (skin)

SAFETY PROFILE: Poison by intravenous and intraperitoneal routes. See also MERCURY COMPOUNDS and CARBAMATES. When heated to decomposition it emits very toxic fumes of NO_x , SO_x , and Hg.

BJC000 CAS: 14324-55-1 HR: 3
BIS(DIETHYLDITHIOCARBAMATO)ZINC

mf: $C_{10}H_{22}N_2S_4 \cdot Zn$ mw: 363.95

PROP: White powder. D: 1.47 @ 20°/20°.

SYNS: DIETHYLDITHIOCARBAMIC ACID ZINC SALT □ ETHAZATE □ ETHYL CYMATE □ ETHYL ZIMATE □ ETHYL ZIRUM □ VULCACURE □ VULKACIT LDA □ ZINC DIETHYLDITHIOCARBAMATE □ ZINC-N,N-DIETHYLDITHIOCARBAMATE

TOXICITY DATA with REFERENCE:

eye-rbt 100 mg/24H MOD 28ZPAK -,11,72
mmo-sat 25 µg/plate MUREAV 68,313,79
mma-sat 25 µg/plate MUREAV 68,313,79
orl-rat LD50:3340 mg/kg 28ZPAK -,11,72
ipr-mus LD50:142 mg/kg KOKABN 26,358,77
orl-rbt LD50:570 mg/kg INMEAF 16,473,47

CONSENSUS REPORTS: Reported in EPA TSCA Inventory. Zinc and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion and subcutaneous routes. Severe irritant to eyes, nose, and throat. Questionable carcinogen with experimental carcinogenic and tumorigenic data. Mutation data reported. When heated to decomposition it emits very toxic fumes of NO_x and SO_x. See also ZINC COMPOUNDS and CARBAMATES.

BJC250 CAS: 738-99-8 HR: 3
1,4-BIS(N,N'-DIETHYLENE PHOSPHAMIDE) PIPERAZINE

mf: C₁₂H₂₄N₆O₂P₂ mw: 346.36

PROP: Crystals from C₆H₆. Mp: 187–189°.

SYNS: 1,4-BIS(BIS(1-AZIRIDINYL)PHOSPHINYL)PIPERAZINE □ DIPIN □ DIPINE □ ENT 50,107 □ 1,4-PIPERAZINEDIYLBIS(BIS(1-AZIRIDINYL)PHOSPHINE) OXIDE □ TETRAETHYLENE IMIDEPIPERAZINE-N,N'-DIPHOSPHORIC ACID

TOXICITY DATA with REFERENCE:

dlt-oin-unr 1 ppH/3H-C AESAAI 62,790,69
cyt-hmn:lym 29 µmol/L SOGEBZ 10,1580,74
sce-hmn:lym 10 mg/L TGANAK 16(2),34,82
cyt-rat-ipr 60 mg/kg SOGEBZ 11,1347,75
ipr-mus LD50:90 mg/kg PCJOAU 14,363,80
orl-mus LD50:68 mg/kg RPTOAN 36,240,73
scu-mus LD50:58 mg/kg ANTBAL 21,262,76

SAFETY PROFILE: Poison by ingestion, intraperitoneal, and subcutaneous routes. Human mutation data reported. When heated to decomposition it emits very toxic fumes of PO_x and NO_x.

BJC500 HR: 3
BISDIETHYLENE TRIAMINE COBALT(III) PERCHLORATE

mf: C₈H₂₆Cl₃CoN₆O₁₂ mw: 562.54

CONSENSUS REPORTS: Cobalt and its compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Very sensitive to impact. Explodes @ 325°. When heated to decomposition it emits toxic fumes of NO_x. See also COBALT COMPOUNDS and PERCHLORATES.

BJD000 CAS: 34491-12-8 HR: 3
BIS(DIETHYLTHIO)CHLORO METHYL - PHOSPHONATE

mf: C₅H₁₂ClOPS₂ mw: 218.71

SYNS: CHEMAGRO 5461 □ CHEMAGRO R-5461 □ S,S-DIETHYL (CHLOROMETHYL)PHOSPHONODITHIOATE □ ENT 27,267 □ R-5461

TOXICITY DATA with REFERENCE:

orl-rat LD50:35 mg/kg ARSIM* 20,7,66
skn-rat LD50:79 mg/kg TXAPA9 12,286,68
ipr-rat LD50:23 mg/kg TXAPA9 12,286,68
orl-mus LDLo:210 mg/kg AEECTCV 14,111,85
ipr-mus LD50:43 mg/kg TXAPA9 12,286,68
orl-gpg LD50:224 mg/kg TXAPA9 12,286,68
ipr-gpg LD50:109 mg/kg TXAPA9 12,286,68

SAFETY PROFILE: Poison by ingestion, skin contact, and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of SO_x, PO_x, and Cl⁻.

BJD250 CAS: 4394-93-8 HR: 3
BIS(DIFLUOROAMINO)DIFLUOROMETHANE

mf: CF₆N₂ mw: 154.02

PROP: Gas. D: 1.50 @ 25°/4°, Fp: -162° (to -1°), bp: -32°.

SAFETY PROFILE: An unstable explosive which may be initiated by phase changes. Upon decomposition it emits toxic fumes of F⁻ and NO_x. For preparation, handling, and storage, use protective equipment.

BJD375 CAS: 30957-47-2 HR: 3
1,1-BIS(DIFLUOROAMINO)-2,2-DIFLUORO-2-NITROETHYL METHYL ETHER

mf: C₃H₃F₆N₃O₃ mw: 243.07

SAFETY PROFILE: A shock-sensitive explosive. When heated to decomposition it emits toxic fumes of F⁻ and NO_x. See also ETHERS.

BJD500 CAS: 13084-47-4 HR: 3
1,2-BIS(DIFLUOROAMINO)ETHANOL

mf: C₂H₄F₄N₂O mw: 148.05

SAFETY PROFILE: An impact-sensitive explosive. When heated to decomposition it emits toxic fumes of F⁻ and NO_x. See also EXPLOSIVES.

BJD750 CAS: 13084-45-2 HR: 3
1,2-BIS(DIFLUOROAMINO)ETHYL VINYL ETHER

mf: C₄H₆F₄N₂O mw: 174.10
F₂NCH₂CH(NF₂)OCH=CH₂

SAFETY PROFILE: An impact-sensitive explosive. When heated to decomposition it emits toxic fumes of F⁻ and NO_x. See also EXPLOSIVES and ETHERS.

BJE000 CAS: 33364-51-1 HR: 3
4,4-BIS(DIFLUOROAMINO)-3-FLUOROIMINO-1-PENTENE

mf: C₅H₆F₅N₃ mw: 203.06
H₂C=CHC(N:F)C(NF₂)₂CH₃

SAFETY PROFILE: May explode if heated. When heated to decomposition it emits toxic fumes of F⁻ and NO_x. See also EXPLOSIVES.

BJE250 CAS: 18273-30-8 HR: 3
1,2-BIS(DIFLUOROAMINO)-N-NITROETHYL

AMINEmf: C₂H₄F₄N₄O₂ mw: 192.07**SAFETY PROFILE:** May explode when heated above 75°C. When heated to decomposition it emits toxic fumes of F⁻ and NO_x. See also EXPLOSIVES.**BJE325 CAS: 55124-14-6 HR: 3****BIS(DIFLUOROBORYL)METHANE**mf: CH₂B₂F₄ mw: 111.64**SAFETY PROFILE:** Highly reactive. Explodes in air or on contact with water. When heated to decomposition it emits toxic fumes of F⁻. See also BORON COMPOUNDS and BORANES.**BJE500 CAS: 52578-56-0 HR: 2****BIS(DIHYDROXYPHENYL)SULFIDE**mf: C₁₂H₁₀O₂S mw: 218.28**SYN:** DIRESORCYL SULFIDE**TOXICITY DATA with REFERENCE:**

eye-rbt 500 mg SEV IHFCAY 6,1,67

orl-rat LD50:4290 mg/kg IHFCAY 6,1,67

SAFETY PROFILE: Mildly toxic by ingestion. A severe eye irritant. See also SULFIDES. When heated to decomposition it emits toxic fumes of SO_x.**BJE550 CAS: 2162-74-5 HR: 3****BIS(2,6-DIISOPROPYLPHENYL)CARBODIIMIDE**mf: C₂₅H₃₄N₂ mw: 362.61**SYNS:** BENZENAMINE, N,N'-METHANETETRAYLBIS(2,6-BIS(1-METHYLETHYL)-) □ CARBO D □ CARBODIIMIDE, BIS(2,6-DIISOPROPYLPHENYL)- □ N,N'-METHANETETRAYLBIS(2,6-BIS(1-METHYLETHYL)BENZENAMINE) □ STABOXOL 1**TOXICITY DATA with REFERENCE:**

orl-rat LD50:200 mg/kg NTIS** OTS0545280

ihl-rat LCLo:100 mg/m³/6H NTIS** OTS0545280

ipr-rat LD50:200 mg/kg NTIS** OTS0545280

ihl-mus LCLo:1 g/m³/1H NTIS** OTS0545280ihl-rbt LCLo:100 mg/m³/6H NTIS** OTS0545280ihl-gpg LCLo:100 mg/m³/6H NTIS** OTS0545280**SAFETY PROFILE:** A poison by ingestion, intraperitoneal, and inhalation. When heated to decomposition it emits toxic vapors of NO_x.**BJE600 CAS: 49773-64-0 HR: D****2,5-BIS(3,4-DIMETHOXYPHENYL)-1,3,4-THIADIAZOLE**mf: C₁₈H₁₈N₂O₄S mw: 358.44**SYN:** 1,3,4-THIADIAZOLE, 2,5-BIS(3,4-DIMETHOXYPHENYL)-**SAFETY PROFILE:** Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x and SO_x.**BJE700 CAS: 107572-59-8 HR: D****3,5-BIS(3,4-DIMETHOXYPHENYL)-1H-1,2,4-TRIAZOLE**mf: C₁₈H₁₉N₃O₄ mw: 341.40**SYN:** 1H-1,2,4-TRIAZOLE, 3,5-BIS(3,4-DIMETHOXYPHENYL)-**SAFETY PROFILE:** Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO_x.**BJE750 CAS: 115-26-4 HR: 3**
BIS(DIMETHYLAMIDO)FLUORO PHOSPHATEmf: C₄H₁₂FN₂OP mw: 154.15**PROP:** Liquid. Misc in H₂O and most org solvs. D: 1.115 mm @ 20°, bp: 67° @ 4 mm.**SYNS:** BFP □ BFPO □ BIS(DIMETHYLAMIDO)PHOSPHORYL FLUORIDE □ BIS(DIMETHYLAMINO)FLUOROPHOSPHATE □ BISDIMETHYLAMINOFLUOROPHOSPHINE OXIDE □ CR 409 □ DIFO □ DIMEFOX □ DMF □ ENT 19,109 □ FLUOPHOSPHORIC ACID DI(DIMETHYLAMIDE) □ FLUORURE de N,N,N',N'-TETRAMETHYLE PHOSPHORO-DIAMIDE (FRENCH) □ HANANE □ PESTOX IV □ PESTOX XIV □ PESTOX 14 □ T-2002 □ TERRA-SYSTAM □ TERRA-SYTAM □ TERRASYTUM □ N,N,N',N'-TETRAMETHYL-DIAMIDO-FOSFORZUUR-FLUORIDE (DUTCH) □ TETRAMETHYLDIAMIDOPHOSPHORIC FLUORIDE □ N,N,N',N'-TETRAMETHYL-DIAMIDO-PHOSPHORSAEURE-FLUORID (GERMAN) □ TETRAMETHYL-PHOSPHORODIAMIDIC FLUORIDE □ N,N,N,N'-TETRAMETHYLPHOSPHORODIAMIDIC FLUORIDE □ N,N,N',N'-TETRAMETIL-FOSFORODIAMMIDO-FLUORURO (ITALIAN) □ TETRA SYTAM □ TL 792 □ WACKER S 14/10**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1 mg/kg NTIS** PB158-508

ihl-rat LC50:2 mg/m³/10M NTIS** PB158-508

skn-rat LD50:2 mg/kg WRPCA2 9,119,70

ipr-rat LD50:5 mg/kg AMIHC 6,9,52

scu-rat LDLo:300 µg/kg NTIS** PB158-508

orl-mus LD50:2 mg/kg BESAAT 12,161,66

ihl-mus LC50:950 mg/m³/10M NTIS** PB158-508

ipr-mus LD50:1400 µg/kg JPETAB 112,231,54

scu-mus LD50:1 mg/kg NTIS** PB158-508

ivn-dog LD50:5 mg/kg JPETAB 112,231,54

CONSENSUS REPORTS: EPA Extremely Hazardous Substances List.**OSHA PEL:** TWA 2.5 mg(F)/m³**ACGIH TLV:** TWA 2.5 mg(F)/m³; BEI: 3 mg/g creatinine of fluorides in urine prior to shift; 10 mg/g creatinine of fluorides in urine at end of shift.**NIOSH REL:** (Fluorides, Inorganic) TWA 2.5 mg(F)/m³**SAFETY PROFILE:** Poison by ingestion, skin contact, intraperitoneal, subcutaneous, and intravenous routes. When heated to decomposition it emits very toxic fumes of F⁻, NO_x, and PO_x.**BJF000 CAS: 494-38-2 HR: 3****3,6-BIS(DIMETHYLAMINO)ACRIDINE**mf: C₁₇H₁₉N₃ mw: 265.39**PROP:** Yellow needles from EtOH. Mp: 180–181°. Sol in EtOH and Me₂CO.**SYNS:** ACRIDINE ORANGE □ ACRIDINE ORANGE FREE BASE □ BASIC ORANGE 3RN □ 2,8-BISDIMETHYLAMINO-ACRIDINE □ BRILLIANT ACRIDINE ORANGE E □ C.I. 46005 □ C.I. No. 46005:1 □ C.I. BASIC ORANGE 14 □ C.I. SOLVENT ORANGE 15 □ 3,6-DI(DIMETHYLAMINO)ACRIDINE □ EUCHRYSLINE □ RHODULINE ORANGE □ SOLVENT ORANGE 15 □ N,N,N'-TETRAMETHYL-3,6-ACRIDINEDIAMINE □ WAXOLINE ORANGE A**TOXICITY DATA with REFERENCE:**

mmo-omi 10 µg/L MIBLAO 49,223,80

dns-rat:lv 1 mmol/L ENMUDM 3,11,81

otr-ham:emb 1 µg/L NCIMAV 58,243,81

scu-mus LD50:250 mg/kg BJEPA5 28,1,47