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ZAK000 **HR: 2**

ZAMIA DEBILIS

PROP: Dried, ground-up zamia tubers were used (85CVA2 5,197,70).

TOXICITY DATA with REFERENCE:

orl-rat TDLo:650 g/kg/77W-C:ETA 85CVA2 5,197,70

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data.

ZAK200 **CAS: 37762-06-4** **HR: 3**

ZAPRINAST

mf: $C_{13}H_{13}N_5O_2$ mw: 271.28

SYN: 7H-1,2,3-TRIAZOLO(4,5-D)PYRIMIDIN-7-ONE, 1,4-DIHYDRO-5-(2-PROPOXYPHENYL)-

TOXICITY DATA with REFERENCE:

ipr-mus TDLo:20 mg/kg TJADAB 164,213,2001

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

ZAK300 **CAS: 17560-51-9** **HR: 3**

ZAROXOLYN

mf: $C_{16}H_{16}ClN_3O_3S$ mw: 365.86

PROP: Crystals from ethanol. Mp: 253–259°.

SYNS: 7-CHLORO-1,2,3,4-TETRAHYDRO-2-METHYL-3-(2-METHYLPHENYL)-4-OXO-6-QUINAZOLINESULFONAMIDE □ DIULO □ METENIX □ 2-METHYL-3-*o*-TOLYL-6-SULFAMYL-7-CHLORO-1,2,3,4-TETRAHYDRO-4-QUINAZOLINONE □ METOLAZONE □ OLDREN □ SR 720-22

TOXICITY DATA with REFERENCE:

orl-rat TDLo:22 mg/kg (7-17D preg):REP KSRNAM 12,3394,78

orl-rat TDLo:2750 mg/kg (7-17D preg):TER KSRNAM 12,3394,78

orl-wmn TDLo:150 µg/kg:CNS BMJOAE 1,1381,76

SAFETY PROFILE: Human systemic effects by ingestion: general anesthesia, convulsions, and muscle contractions. An experimental teratogen. Experimental reproductive effects. When heated to decomposition it emits Cl^- , SO_x , and NO_x .

ZAT000 **CAS: 17924-92-4** **HR: 2**

ZEARALENONE

mf: $C_{18}H_{22}O_5$ mw: 318.40

PROP: l-Form: Crystals. Mp: 164–165°. Sol in aq alkali, ether, benzene, alc; almost insol in water. dl-Form: Crystals. Mp: 187–189°.

SYNS: COMPOUND F-2 □ 14,16-DIHYDROXY-3-METHYL-7-OXO-trans-BENZOXACYCLOTETRADEC-11-EN-1-ONE □ FES □ F-2 TOXIN □ FUSARIUM TOXIN □ trans-6-(10-HYDROXY-6-OXO-1-UNDECENYL)- μ -LACTONE, RESORCYLIC ACID □ 6-(10-HYDROXY-6-OXO-trans-1-UNDECENYL)- β -RESORCYCLIC ACID-N-LACTONE □ MYCOTOXIN F2 □ NCI-C50226 □ (-)-

ZEARALENONE □ (s)-ZEARALENONE □ trans-ZEARALENONE □ (10s)-ZEARALENONE

TOXICITY DATA with REFERENCE:

skn-gpg 50 mg/24H SEV JANCA2 57,1121,74

dnr-bcs 2500 mg/L IRLCDZ 7,204,79

mrc-bcs 100 µg/disc CNREA8 36,445,76

orl-mus TDLo:8652 mg/kg/2Y-C:NEO NTPTR* NTP-TR-235,82

CONSENSUS REPORTS: IARC Cancer Review:

Group 3 IMEMDT 7,56,87; Human Inadequate Evidence IMEMDT 31,279,83; Animal Limited Evidence IMEMDT 31,279,83. NTP Carcinogenesis Bioassay (feed); Clear Evidence: mouse NTPTR* NTP-TR-235,82; (feed); No Evidence: rat NTPTR* NTP-TR-235,82. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

SAFETY PROFILE: Experimental reproductive effects. Questionable carcinogen with experimental neoplastigenic, tumorigenic, and teratogenic data. Mutation data reported. A severe skin irritant. When heated to decomposition it emits acrid smoke and irritating fumes.

ZAT050 **CAS: 98644-24-7** **HR: 3**

ZEDOARONDIOL

mf: $C_{15}H_{24}O_3$ mw: 252.35

SYN: 6(1H)-AZULENONE, OCTAHYDRO-1,4-DIHYDROXY-1,4-DIMETHYL-7-(1-METHYLETHYLIDENE)-, (1R,3AR,4S,8AS)-

TOXICITY DATA with REFERENCE:

orl-mus TDLo:25 mg/kg BIPBU* 25,627,2002

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

ZAT100 **CAS: 9010-66-6** **HR: D**

ZEIN

PROP: Powder. Insol in water, alc; sol in glycols, glycol ethers.

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

ZAT300 **CAS: 1318-02-1** **HR: D**

ZEOLITES

PROP: Light brown color. Irregular shape. D: 2.10–2.47°.

SYNS: ALUMINOSILICATES, ZEOLITES □ CRYSTAL STRUCTURE TYPES, ZEOLITES □ ZEOLITE PARTICLES

TOXICITY DATA with REFERENCE:

cyt-hmn:lym 50 mg/L MUREAV 319,303,93

cyt-mus-ipr 50 mg/kg MUREAV 319,303,93

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

ZBA000**HR: D****ZETAR EMULSION****PROP:** A shampoo containing coal tar derivatives (TOLED5 3,325,79).**SYN:** ZET**TOXICITY DATA with REFERENCE:**

mmo-sat 5 mg/plate PHMGBN 20,1,80

mma-sat 10 µg/plate TOLED5 3,325,79

SAFETY PROFILE: Mutation data reported.**ZBA500****CAS: 56775-88-3****HR: 3****ZIMELIDINE**mf: C₁₆H₁₇BrN₂ mw: 317.26**PROP:** Crystals. Mp: 193°**SYNS:** 3-(p-BROMOPHENYL)-N,N-DIMETHYL-3-(3-PYRIDYL)-ALLYLAMINE □ 3-(4-BROMOPHENYL)-N,N-DIMETHYL-3-(3-PYRIDINYL)-2-PROPEN-1-AMINE □ (Z)-3-(4'-BROMOPHENYL)-3-(3'-PYRIDYL)DIMETHYLALLYLAMINE □ cis-H 102.09 □ cis-ZIMELIDINE □ (Z)-ZIMELIDINE**TOXICITY DATA with REFERENCE:**

orl-wmn TDLo:56 mg/kg/14D:GIT,CNS BMJOAE 285,1009,82

orl-rat LD50:900 mg/kg DRUGAY 24,169,82

ivn-rat LD50:50 mg/kg DRUGAY 24,169,82

orl-mus LD50:800 mg/kg DRUGAY 24,169,82

ivn-mus LD50:60 mg/kg DRUGAY 24,169,82

SAFETY PROFILE: Poison by intravenous route.Experimental reproductive effects. Moderately toxic by ingestion. Human systemic effects by ingestion: muscle weakness, headache and nausea. When heated to decomposition it emits toxic fumes of Br⁻ and NO_x.**ZBA525****CAS: 60525-15-7****HR: 3****ZIMELIDINE DIHYDROCHLORIDE**mf: C₁₆H₁₇BrN₂•2ClH mw: 390.18**PROP:** Mp: 193°.**SYNS:** (Z)-3-(4-BROMOPHENYL)-N,N-DIMETHYL-3-(3-PYRIDINYL)-2-PROPEN-1-AMINE DIHYDROCHLORIDE □ H102/09 HYDROCHLORIDE □ ZIMELIDINE HYDROCHLORIDE**TOXICITY DATA with REFERENCE:**

orl-man TDLo:36 mg/kg BMJOAE 287,1672,83

orl-wmn TDLo:12 mg/kg/6D-I:PNS HUTODJ 3,141,84

orl-wmn TDLo:36 mg/kg/9D-I:GIT,LIV BMJOAE 287,1181,83

orl-rat LD50:844 mg/kg APSXAS 20,295,83

ipr-rat LD50:99,800 µg/kg APSXAS 20,295,83

scu-rat LD50:227 mg/kg APSXAS 20,295,83

ivn-rat LD50:45,800 µg/kg KSRNAM 17,1833,83

orl-mus LD50:341 mg/kg KSRNAM 17,1833,83

ipr-mus LD50:84,400 µg/kg APSXAS 20,295,83

scu-mus LD50:154 mg/kg KSRNAM 17,1833,83

ivn-mus LD50:27,700 µg/kg KSRNAM 17,1833,83

orl-dog LD50:271 mg/kg KSRNAM 17,1833,83

ivn-dog LD50:57 mg/kg KSRNAM 17,1833,83

orl-cat LDLo:80 mg/kg APSXAS 20,295,83

orl-rbt LD50:300 mg/kg KSRNAM 17,1833,83

ivn-rbt LD50:50,800 µg/kg KSRNAM 17,1833,83

SAFETY PROFILE: Poison by ingestion, subcutaneous, intravenous, and intraperitoneal routes. Human systemic effects: ataxia, diarrhea, fasciculations, hypermotility, jaundice. An experimental teratogen.Experimental reproductive effects. When heated to decomposition it emits toxic fumes of Br⁻, NO_x, and HCl. See also ZIMELIDINE.**ZBJ000****CAS: 7440-66-6****HR: 3****ZINC****DOT:** UN 1435/UN 1436

af: Zn aw: 65.37

PROP: Bluish-white, lustrous, metallic element. Not perceptibly attacked by pure H₂O. Mp: 419.8°, bp: 908°, d: 7.14 @ 25°, vap press: 1 mm @ 487°. Stable in dry air.**SYNS:** BLUE POWDER □ C.I. 77945 □ C.I. PIGMENT BLACK 16

□ C.I. PIGMENT METAL 6 □ EMANAY ZINC DUST □

GRANULAR ZINC □ JASAD □ MERRILLITE □ PASCO □ ZINC

ASHES (UN 1435) (DOT) □ ZINC DUST □ ZINC DUST (DOT) □

ZINC POWDER □ ZINC POWDER (DOT)

TOXICITY DATA with REFERENCE:

skn-hmn 300 µg/3D-I:MLD 85DKA8 -,127,77

ihl-hmn TCLo:124 mg/m³/50M:PUL,SKN AHYGAJ 72,358,10**CONSENSUS REPORTS:** Zinc and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.**DOT CLASSIFICATION:** 4.3; Label: Dangerous When Wet, Spontaneously Combustible; DOT Class: 4.3; Label: Dangerous When Wet (UN 1435)**SAFETY PROFILE:** Human systemic effects by ingestion: cough, dyspnea, and sweating. A human skin irritant. Pure zinc powder, dust, and fume are relatively nontoxic to humans by inhalation. The difficulty arises from oxidation of zinc fumes immediately prior to inhalation or presence of impurities such as Cd, Sb, As, Pb. Inhalation may cause sweet taste, throat dryness, cough, weakness, generalized aches, chills, fever, nausea, vomiting.Flammable in the form of dust when exposed to heat or flame. May ignite spontaneously in air when dry. Explosive in the form of dust when reacted with acids. Incompatible with NH₄NO₃, BaO₂, Ba(NO₃)₂, Cd, CS₂, chlorates, Cl₂, ClF₃, CrO₃, (ethyl acetoacetate + tribromoneopentyl alcohol), F₂, hydrazine mononitrate, hydroxylamine, Pb(N₃)₂, (Mg + Ba(NO₃)₂ + BaO₂), MnCl₂, HNO₃, performic acid, KClO₃, KNO₃, K₂O₂, Se, NaClO₃, Na₂O₂, S, Te, H₂O, (NH₄)₂S, As₂O₃, CS₂, CaCl₂, NaOH, chlorinated rubber, catalytic metals, halocarbons, o-nitroanisole, nitrobenzene, nonmetals, oxidants, paint primer base, pentacarbonyliron, transition metal halides, seleninyl bromide. To fight fire, use special mixtures of dry chemical. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS.**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: Zinc, 7030; Welding and Brazing Fume, 7200; Elements, 7300.**ZBS000****CAS: 557-34-6****HR: 3****ZINC ACETATE**mf: C₄H₆O₄•Zn mw: 183.47**PROP:** Crystals; astringent taste. D: 1.735, mp: 237°.

Very sol in water; somewhat sol in alc.

SYNS: ACETIC ACID, ZINC SALT □ DICARBOMETHOXYZINC □ ZINC DIACETATE**TOXICITY DATA with REFERENCE:**

cyt-ham:ovr 45 mg/L MUREAV 223,267,89
 msc-mus:lym 10 mg/L MUREAV 223,267,89
 orl-rat LD50:2510 mg/kg MarJV# 29MAR77
 ipr-mus LD50:57 mg/kg TXAPA9 49,41,79
 invn-rbt LDLo:5 mg/kg AIMDAP 37,641,26

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

SAFETY PROFILE: Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion. Experimental reproductive effects. Mutation data reported. Incompatible with zinc salts, alkalies and their carbonates, oxalates, phosphates, sulfides. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS.

ZCA000 CAS: 5970-45-6 HR: 2
ZINC ACETATE, DIHYDRATE

mf: $C_4H_6O_4 \cdot Zn \cdot 2H_2O$ mw: 219.51

PROP: Crystals from dil aq AcOH; slt acetone odor; sltly efflorescent, astringent taste. D: 1.735, mp: 237°, loses $2H_2O$ @ >100°. Very sol in water.

SYNS: ACETIC ACID, ZINC SALT, DIHYDRATE □ OCTAN ZINECNATY (CZECH) □ ZINC DIACETATE, DIHYDRATE

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,10,72
 eye-rbt 20 mg/24H MOD 28ZPAK -,10,72
 cyt-hmn:lym 7 mg/L CYGEDX 12(3),46,78
 orl-rat LD50:2170 mg/kg 28ZPAK -,10,72

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

SAFETY PROFILE: Moderately toxic by ingestion. Human mutation data reported. A skin and eye irritant. Keep in well closed containers. Incompatible with zinc salts in general. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC ACETATE and ZINC COMPOUNDS.

ZCJ000 CAS: 14024-63-6 HR: 3
ZINC ACETOACETONATE

mf: $C_{10}H_{14}O_4Zn$ mw: 263.61

PROP: Powder or crystals from hexane. Mp: 127°, sublimes @ 0.5°. Sol in dry org solvs.

SYNS: BIS(2,4-PENTANEDIONATO-O,O')ZINC □ ZINC 2,4-PENTANEDIONATE

TOXICITY DATA with REFERENCE:

ipr-rat LD50:50 mg/kg NCIUS* PH 43-64-886,SEPT,70

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

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS.

ZCS000 CAS: 63904-83-6 HR: 3
ZINC ALLYL DITHIO CARBAMATE

mf: $C_8H_{12}N_2S_4Zn$ mw: 329.83

SYN: BIS(ALLYLDITHIOCARBAMATO)ZINC

TOXICITY DATA with REFERENCE:

orl-rat LD50:375 mg/kg SCCUR* -,9,61
 orl-mus LD50:440 mg/kg SCCUR* -,9,61

orl-rbt LDLo:420 mg/kg SCCUR* -,9,61

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

SAFETY PROFILE: Poison by ingestion. When heated to decomposition it emits very toxic fumes of NO_x , SO_x , and ZnO. See also ZINC COMPOUNDS and CARBAMATES.

ZDA000 CAS: 63885-01-8 HR: 3
ZINC AMMONIUM NITRITE

DOT: UN 1512

PROP: Solid.

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

DOT CLASSIFICATION: 5.1; Label: Oxidizer

SAFETY PROFILE: Flammable by spontaneous chemical reaction. A powerful oxidizing agent. When heated to decomposition it emits toxic fumes of NO_x , NH_3 , and ZnO. See also NITRITES and ZINC COMPOUNDS.

ZDJ000 CAS: 1303-39-5 HR: 3
ZINC ARSENATE

mf: $As_4O_{15} \cdot 5Zn$ mw: 866.53

PROP: White, odorless powder.

SYNS: ARSENIC ACID, ZINC SALT □ ZINC ARSENATE, BASIC

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

OSHA PEL: TWA 0.01 mg(As)/m³; Cancer Hazard

ACGIH TLV: BEI: 35 μ(As)/L inorganic arsenic and methylated metabolites in urine

NIOSH REL: CL 0.002 mg(As)/m³/15M

DOT CLASSIFICATION: 6.1; Label: Poison

SAFETY PROFILE: Confirmed human carcinogen. A poison. When heated to decomposition it emits toxic fumes of As and ZnO. See also ARSENIC COMPOUNDS and ZINC COMPOUNDS.

ZDJ100 CAS: 12271-71-5 HR: 3
ZINC ARSENATE FLUORIDE

mf: $As_2F_2O_8Zn_4$ mw: 577.32

TOXICITY DATA with REFERENCE:

orl-rat LD50:3500 mg/kg GISAAA 32(7),102,67

DOT CLASSIFICATION: 6.1; Label: Poison

SAFETY PROFILE: A poison. When heated to decomposition it emits toxic vapors of zinc, arsenic, and F⁻.

ZDS000 CAS: 10326-24-6 HR: 3
ZINC-m-ARSENITE

DOT: UN 1712

mf: $AsHO_2 \cdot 1/2Zn$ mw: 140.61

PROP: A white powder.

SYNS: ARSENIUS ACID, ZINC SALT (9CI) □ ZINC ARSENITE, solid (DOT) □ ZINC METAARSENITE □ ZINC METHARSENITE □ ZMA

TOXICITY DATA with REFERENCE:

orl-rat LD50:271 mg/kg GISAAA 51(1),81,86
 skn-rat LD50:1503 mg/kg GISAAA 51(1),81,86

orl-mus LD50:144 mg/kg GISAAA 51(1),81,86

ipr-mus LD50:313 mg/kg GISAAA 51(1),81,86

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

OSHA PEL: TWA 0.01 mg(As)/m³; Cancer Hazard

ACGIH TLV: TWA 0.01 mg/m³; Confirmed Human Carcinogen; BEI: 35 µ(As)/L inorganic arsenic and methylated metabolites in urine

NIOSH REL: (Inorganic Arsenic) CL 0.002

mg(As)/m³/15M

DOT CLASSIFICATION: 6.1; Label: Poison

SAFETY PROFILE: Confirmed human carcinogen. Poison by ingestion and intraperitoneal routes. Moderately toxic by skin contact. When heated to decomposition it emits toxic fumes of As and ZnO. See also ARSENIC COMPOUNDS and ZINC COMPOUNDS.

ZDS500 CAS: 24308-84-7 HR: 2

ZINC BENZENESULFINATE

mf: C₁₂H₁₂O₄S₂•Zn mw: 349.73

SYNS: BENZENESULFINIC ACID, ZINC SALT □ ZINC BIS(BENZENESULFINATE)

TOXICITY DATA with REFERENCE:

eye-rbt 100 µL/24H MOD IJTOFN 16(Suppl 2),41,1997

orl-rat LD50:>2 g/kg IJTOFN 16(Suppl 2),41,1997

SAFETY PROFILE: Moderately toxic by ingestion. A mild eye irritant. When heated to decomposition it emits toxic vapors of SO_x and Zn.

ZEA000 CAS: 16509-79-8 HR: 3

ZINC BIS(DIMETHYLDITHIOCARBAMATE)-CYCLOHEXYLAMINE COMPLEX

mf: C₁₂H₂₅N₃S₄Zn mw: 405.01

SYNS: ZINC, DIMETHYLDITHIOCARBAMATE CYCLOHEXYLAMINE COMPLEX □ ZIRAM CYCLOHEXYLAMINE COMPLEX

TOXICITY DATA with REFERENCE:

orl-rat LD50:1400 mg/kg TXAPA9 21,315,72

orl-bwd LD50:32 mg/kg TXAPA9 21,315,72

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

SAFETY PROFILE: Poison by ingestion. When heated to decomposition it emits very toxic fumes of NO_x, SO_x, and ZnO. See also ZINC COMPOUNDS and CARBAMATES.

ZEJ000 CAS: 557-09-5 HR: 3

ZINC CAPRYLATE

mf: C₁₆H₃₀O₄•Zn mw: 351.83

PROP: Lustrous scales. Mp: 136°. Sltly sol in boiling water; mod sol in boiling alc.

SYN: OCTANOIC ACID, ZINC SALT (2:1)

TOXICITY DATA with REFERENCE:

itr-rat LDLo:9 mg/kg JOHYAY 18,144,74

orl-mus LD50:2370 mg/kg JHEMA2 18,144,74

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

SAFETY PROFILE: Poison by intratracheal route. Moderately toxic by ingestion. Used as a fungicide. When

heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS.

ZEJ050 CAS: 3486-35-9 HR: D

ZINC CARBONATE (1:1)

mf: CO₃•Zn mw: 125.38

PROP: Rhombohedral colorless crystals. Practically insol in H₂O.

SYN: CARBONIC ACID, ZINC SALT (1:1)

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

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

ZEJ100 CAS: 107667-60-7 HR: 3

ZINC I-CARNOSINE

mf: C₉H₁₂N₄O₃Zn mw: 289.62

SYNS: POLAPREZINC □ Z 103 □ ZINC, (N-β-ALANYL-L-HISTIDINATO(2-)-(N,N,N),O⁴)-

TOXICITY DATA with REFERENCE:

orl-rat LD50:7375 mg/kg ARZNAD 41,1033,91

ipr-rat LD50:405 mg/kg ARZNAD 41,1033,91

scu-rat LD50:>5 g/kg ARZNAD 41,1033,91

orl-mus LD50:1269 mg/kg ARZNAD 41,1033,91

ipr-mus LD50:165 mg/kg ARZNAD 41,1033,91

scu-mus LD50:758 mg/kg ARZNAD 41,1033,91

orl-dog LD:>200 mg/kg ARZNAD 45,52,95

orl-mky LD:>626 mg/kg ARZNAD 43,562,93

SAFETY PROFILE: A poison by intraperitoneal route. Moderately toxic by ingestion and subcutaneous routes.

An experimental teratogen. Other experimental reproductive effects. When heated to decomposition it emits toxic vapors of NO_x and Zn.

ZES000 CAS: 10361-95-2 HR: 3

ZINC CHLORATE

DOT: UN 1513

mf: Cl₂O₆•Zn mw: 232.27

PROP: Colorless, very deliq crystals.

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

DOT CLASSIFICATION: 5.1; Label: Oxidizer

SAFETY PROFILE: A powerful oxidizer. Probably a skin, eye, and mucous membrane irritant. The tetrahydrated salt explodes at 60°C. Explosive reaction with copper(II) sulfide. Can react violently with Al, Sb₂S₃, As, C, charcoal, Cu, MnO₂, metal sulfides, dibasic organic acids, organic matter, P, S, H₂SO₄. Incandescent reaction with antimony(III) sulfide, arsenic(III) sulfide, tin(II) sulfide, tin(IV) sulfide. When heated to decomposition it emits toxic fumes of Cl⁻ and ZnO. See also CHLORATES and ZINC COMPOUNDS.

ZFA000 CAS: 7646-85-7 HR: 3

ZINC CHLORIDE

DOT: UN 1840/UN 2331

mf: Cl₂Zn mw: 136.27

PROP: Odorless, colorless, cubic, white, highly deliq crystals. Mp: 290°, bp: 732°, d: 2.91 @ 25°, vap press: 1

mm @ 428°. Sol in MeOH, EtOH, Et₂O, and Me₂O; very sol in H₂O. IDLH 50 mg/m³.

SYNS: BUTTER of ZINC □ CHLORURE de ZINC (FRENCH) □ ZINC BUTTER □ ZINC CHLORIDE (ACGIH, OSHA) □ ZINC CHLORIDE, anhydrous (UN 2331) (DOT) □ ZINC CHLORIDE, solution (UN 1840) (DOT) □ ZINC (CHLORURE de) (FRENCH) □ ZINC DICHLORIDE □ ZINC MURIATE, solution (DOT) □ ZINCO (CLORURO di) (ITALIAN) □ ZINKCHLORID (GERMAN) □ ZINKCHLORIDE (DUTCH)

TOXICITY DATA with REFERENCE:

mma-sat 90 mmol/L SOGEBZ 13,1010,77
dni-hmn:lym 360 µmol/L IAAAAM 77,461,85
par-ckn TDLo:15 mg/kg;ETA,REP CANCAR 6,464,53
ihl-man TCLo:4800 mg/m³/30M:PUL SinJF# 10JAN74
ihl-hmn TCLo:4800 mg/m³/3H YAKUD5 22,291,80
orl-rat LD50:350 mg/kg FOREAE 7,313,42
ihl-rat LCLo:1960 mg/m³/10M ARTODN 59,160,86
ipr-rat LD50:58 mg/kg VHTODE 30,224,88
ivn-rat LDLo:30 mg/kg FEPA7 9,260,50
orl-mus LD50:350 mg/kg FOREAE 7,313,42
ipr-mus LD50:24 mg/kg TXAPA9 63,461,82

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

OSHA PEL: Fume: TWA 1 mg/m³; STEL 2 mg/m³

ACGIH TLV: TWA 1 mg/m³; STEL 2 mg/m³ (fume)

DOT CLASSIFICATION: 8; Label: Corrosive

SAFETY PROFILE: Poison by ingestion, intravenous, and intraperitoneal routes. Human systemic effects by inhalation: pulmonary changes. An experimental teratogen. Experimental reproductive effects.

Questionable carcinogen with experimental tumorigenic data. Human mutation data reported. A corrosive irritant to skin, eyes, and mucous membranes. Exposure to ZnCl₂ fumes or dusts can cause dermatitis, boils, conjunctivitis, gastrointestinal tract upsets. The fumes are highly toxic. Incompatible with potassium. Mixtures of the powdered chloride and powdered zinc are flammable. When heated to decomposition it emits toxic fumes of Cl⁻ and ZnO. See also ZINC COMPOUNDS and CHLORIDES.

ANALYTICAL METHOD: For occupational chemical analysis use OSHA: #ID-125g.

ZFA100 CAS: 12018-19-8 HR: 3 ZINC CHROMATE

mf: Cr₂O₄Zn mw: 233.37

SYNS: CHROMIUM ZINC OXIDE □ ZINC CHROMITE □ ZINC CHROMIUM OXIDE □ ZN-0312 T 1/4"

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

OSHA PEL: CL 0.1 mg(CrO₃)/m³

SAFETY PROFILE: A poison. When heated to decomposition it emits toxic vapors of zinc.

ZFA102 CAS: 14018-95-2 HR: 3 ZINC CHROMATE

mf: Cr₂O₇•Zn mw: 281.37

PROP: D: 3.4 @ 20°. Insol in cold water and acetone. Decomposes in hot water. Sol in acids and liquid ammonia. IDLH Ca [15 mg/m³ {as Cr(VI)}].

SYNS: DICHROMIC ACID, ZINC SALT (1:1) □ ZINC BICHROMATE □ ZINC CHROMIUM OXIDE □ ZINC DICHROMATE □ ZINC DICHROMATE (VI)

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

OSHA PEL: CL 0.1 mg(CrO₃)/m³

NIOSH REL: (Chromium(VI)): TWA 0.001 mg(Cr)/m³

SAFETY PROFILE: A poison. When heated to decomposition it emits toxic vapors of zinc and chromium.

ZFJ100 CAS: 13530-65-9 HR: 3 ZINC CHROMATE

mf: CrH₂O₄•Zn mw: 183.39

PROP: Lemon-yellow prisms. Mp: 316°. Sol in H₂O. IDLH Ca [15 mg/m³ {as Cr(VI)}].

SYNS: BASIC ZINC CHROMATE □ BUTTERCUP YELLOW □ CHROMIC ACID, ZINC SALT □ CHROMIUM ZINC OXIDE □ C.I. 77955 □ C.I. PIGMENT YELLOW 36 □ CITRON YELLOW □ C.P. ZINC YELLOW X-883 □ PRIMROSE YELLOW □ PURE ZINC CHROME □ ZINC CHROMATE(VI) HYDROXIDE □ ZINC CHROME YELLOW □ ZINC CHROMIUM OXIDE □ ZINC HYDROXYCHROMATE □ ZINC TETRAOXYCHROMATE 76A □ ZINC YELLOW

TOXICITY DATA with REFERENCE:

mmo-sat 800 ng/plate MUREAV 156,219,85
oms-hmn:oth 500 mg/L BJCAAI 44,219,81
ihl-man TCLo:5 mg/m³/8H/7Y-I:CAR,PUL BJIMAG 32,62,75
imp-rat TDLo:12,928 µg/kg;CAR BJIMAG 43,243,86
ivn-mus LDLo:30 mg/kg AQMOAC #70-15,70

CONSENSUS REPORTS: NTP 10th Report on Carcinogens. IARC Cancer Review: Group 1 IMEMDT 7,165,87; Human Sufficient Evidence IMEMDT 23,205,80; Animal Sufficient Evidence IMEMDT 23,205,80. EPA Genetic Toxicology Program. Reported in EPA TSCA Inventory. Zinc and chromium and their compounds are on the Community Right-To-Know List.

OSHA PEL: CL 0.1 mg(CrO₃)/m³

ACGIH TLV: TWA 0.01 mg(Cr)/M³; Confirmed Human Carcinogen

DFG MAK: DFG TRK: 0.1 mg/m³; Human Carcinogen

NIOSH REL: (Chromium(VI)) TWA 0.001 mg(Cr(VI))/m³

SAFETY PROFILE: Confirmed human carcinogen producing lung tumors. A poison via intravenous route. Human mutation data reported. See also CHROMIUM COMPOUNDS and ZINC COMPOUNDS.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Chromium Hexavalent, 7024.

ZFJ122 HR: 3 ZINC CHROMATE, POTASSIUM DICHROMATE, and ZINC HYDROXIDE (3:1:1)

mf: CrK₂O₄•3CrO₄Zn•H₂O₂Zn mw: 837.70

SYN: POTASSIUM DICHROMATE, ZINC CHROMATE, and ZINC HYDROXIDE (1:3:1)

TOXICITY DATA with REFERENCE:

imp-rat TDLo:8 mg/kg;CAR CRNGDP 7,831,86

OSHA PEL: CL 0.1 mg(CrO₃)/m³

ACGIH TLV: TWA 0.01 mg(Cr)/M³; Confirmed Human Carcinogen

DFG MAK: DFG TRK: 0.1 mg/m³; Human Carcinogen
NIOSH REL: (Chromium (VI)) TWA 0.001 mg(Cr(VI))/m³
SAFETY PROFILE: Confirmed human carcinogen with experimental carcinogenic data.

ZFJ125 CAS: 37300-23-5 HR: 3
ZINC CHROMATE with ZINC HYDROXIDE and CHROMIUM OXIDE (9:1)

mf: CrO₄•Zn•H₄O₂Zn•CrO₃ mw: 183.39

PROP: Yellow chromate pigment.

SYN: ZINC YELLOW

TOXICITY DATA with REFERENCE:

mmo-sat 90 nmol/plate CRNGDP 2,283,81

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

OSHA PEL: CL 0.1 mg(CrO₃)/m³

ACGIH TLV: TWA 0.01 mg(Cr)/M³; Confirmed Human Carcinogen

DFG MAK: DFG TRK: 0.1 mg/m³; Human Carcinogen

NIOSH REL: (Chromium (VI)) TWA 0.001 mg(Cr(VI))/m³

SAFETY PROFILE: Confirmed human carcinogen producing lung tumors. Mutation data reported. See also CHROMIUM COMPOUNDS and ZINC COMPOUNDS.

ZFJ130 CAS: 50922-29-7 HR: 3
ZINC CHROMITE

mf: CrO₄Zn•H₂O₂Zn mw: 280.76

PROP: IDLH Ca [15 mg/m³ {as Cr(VI)}].

SYNS: BASIC ZINC CHROMATE □ CHROMIC ACID, ZINC SALT, BASIC □ CHROMIUM ZINCATE □ CHROMIUM ZINC OXIDE (9Cl) □ Ts36Khr

TOXICITY DATA with REFERENCE:

mmo-sat 80 µg/plate MUREAV 54,139,78

OSHA PEL: CL 0.1 mg(CrO₃)/m³

ACGIH TLV: TWA 0.05 mg(Cr)/m³

NIOSH REL: (Chromium(VI)): TWA 0.001 mg(Cr)/m³

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: A poison. Mutation data reported. When heated to decomposition it emits toxic vapors of NO_x and Cl⁻.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: chromium hexavalent 7024.

ZFJ250 CAS: 546-46-3 HR: D
ZINC CITRATE

mf: C₆H₅O₇•3/2Zn mw: 290.18

PROP: Crystals from H₂O. Sltly sol in H₂O; insol in CHCl₃, EtOH, Et₂O, and Me₂CO.

SYNS: CITRIC ACID, ZINC SALT (2:3) □ 1,2,3-PROPANETRICARBOXYLIC ACID, 2-HYDROXY-, ZINC SALT (2:3) (9Cl)

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

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

ZFS000 HR: D

ZINC COMPOUNDS

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

SAFETY PROFILE: Variable toxicity, but generally of low toxicity. However, zinc salts, such as chromates and arsenates, are experimental carcinogens. Zinc is not inherently a toxic element. However, when heated, it evolves a fume of zinc oxide, which, when inhaled fresh, can cause a disease known as “brass founders,” “ague,” or “brass chills,” resulting in a sweet taste, throat dryness, cough, weakness, generalized aching, fever, nausea, and vomiting. It is possible for people to become immune to it, but this immunity can be broken by cessation of exposure of only a few days. Zinc oxide dust that is not freshly formed is virtually innocuous. There is no cumulative effect from the inhalation of zinc fumes.

Exposure to zinc chloride fumes can cause damage to the mucous membranes of the nasopharynx and respiratory tract, and give rise to a pale gray cyanosis; fatalities have resulted. Soluble salts of zinc have a harsh metallic taste; small doses can cause nausea and vomiting, whereas larger doses cause violent vomiting and purging. Some cases of intoxication have been reported due to drinking liquids stored in galvanized containers, and in dialysis patients, using a dialyzate prepared with water that had been stored in a galvanized tank. In general, the continued administration of zinc salts in small doses has no effect in humans except those of disordered digestion and constipation. Workers in zinc refining have been reported to suffer from a variety of non-specific intestinal, respiratory, and nervous symptoms. Ulceration of the nasal septum and eczematous dermatosis are also reported. It has been stated that zinc oxide or zinc stearate dust can block the ducts of the sebaceous glands and give rise to a papular, pustular eczema in workers engaged in packing these compounds into barrels. Sensitivity to zinc oxide in humans is extremely rare. Zinc chloride and zinc sulfate, because of caustic action, can cause ulceration of the fingers, hands, and forearms of those who use these compounds as a flux in soldering or other industrial use. This condition has even been observed in men who handle railway ties that have been impregnated with this material. Common air contaminants. When heated to decomposition it emits toxic fumes of ZnO.

ZGA000 CAS: 557-21-1 HR: 3
ZINC CYANIDE

DOT: UN 1713

mf: C₂N₂Zn mw: 117.41

PROP: Rhombic, colorless crystals. Mp: decomp @ 800°. Insol in water; sol in solns of alkali cyanides; decomp by dil mineral acid.

SYNS: CYANURE de ZINC (FRENCH) □ RCRA WASTE NUMBER P121 □ ZINC DICYANIDE

TOXICITY DATA with REFERENCE:

ipr-rat LDLo:100 mg/kg NCNSA6 5,28,53

CONSENSUS REPORTS: Zinc and its compounds, as well as cyanide and its compounds, are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 6.1; Label: Poison

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:** Poison by intraperitoneal route. Can react violently with Mg. When heated to decomposition it emits toxic fumes of CN⁻, ZnO, and NO_x. Used in electroplating operations. See also CYANIDE and ZINC COMPOUNDS.**ZGA500 CAS: 6990-43-8 HR: 2****ZINC o,o-DIBUTYL DITHIOPHOSPHATE**mf: C₁₆H₃₆O₄P₂S₄Zn mw: 548.07**SYNS:** BUTYL ZINC PHOSPHORODITHIOATE (ZN((BUO)2(S)-PS)2) □ BIS(o,o-DIBUTYL PHOSPHORODITHIOATO-S,S')ZINC (T-4) □ CP 15575 □ PHOSPHORODITHIOIC ACID, o,o-DIBUTYL ESTER, ZINC SALT □ RHENOCURE TP □ RHENOCURE TP/S □ VOCOL □ VOCOL 5 □ ZINC, BIS(DIBUTYL DITHIOPHOSPHATE) □ ZINC, BIS(o,o-DIBUTYL PHOSPHORODITHIOATO-S,S'), (T-4)- □ ZINC, DIBUTYLDITHIOPHOSPHATE □ ZINC DIBUTYL PHOSPHORODITHIOATE □ ZINC o,o-DIBUTYL PHOSPHORODITHIOATE**TOXICITY DATA with REFERENCE:**

skn-rbt 500 µL/24H MLD NTIS** OTS0555092

eye-rbt 100 µL/24H SEV NTIS** OTS0555092

orl-rat LD50:2320 mg/kg NTIS** OTS0555092

SAFETY PROFILE: Moderately toxic by ingestion. A mild skin and severe eye irritant. When heated to decomposition it emits toxic vapors of PO_x, SO_x, and Zn.**ZGJ000 HR: 3****ZINC DIHYDRAZIDE**mf: H₆N₄Zn mw: 127.45**CONSENSUS REPORTS:** Zinc and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Explodes at 70°C. When heated to decomposition it emits toxic fumes of NO_x and ZnO. See also ZINC COMPOUNDS and AZIDES.**ZGJ050 CAS: 13598-37-3 HR: 2****ZINC DIHYDROGEN PHOSPHATE DIHYDRATE**mf: H₄O₈P₂•Zn•2H₂O mw: 295.39**SYN:** PHOSPHORIC ACID, ZINC SALT (2:1), DIHYDRATE**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1990 mg/kg TOVEFN (2),35,1995

ipr-rat LD50:271 mg/kg TOVEFN (2),35,1995

orl-mus LD50:1610 mg/kg TOVEFN (2),35,1995

ipr-mus LD50:287 mg/kg TOVEFN (2),35,1995

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic vapors of PO_x and Zn.**ZGJ100 CAS: 7779-86-4 HR: 3****ZINC DITHIONITE****DOT:** UN 1931mf: O₄S₂•Zn mw: 193.49**SYNS:** DITHIONOUS ACID, ZINC SALT (1:1) □ ZINC HYDROSULFITE □ ZINC HYDROSULFITE (DOT)**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.**DOT CLASSIFICATION:** 9; Label: None**SAFETY PROFILE:** Possibly a poison. When heated to decomposition it emits toxic vapors of zinc and SO_x.**ZGS000 CAS: 19210-06-1 HR: 2****ZINC DITHIOPHOSPHATE**mf: H₃O₂PS₂•xZn mw: 587.71**PROP:** Lubricating oil additive.**SYN:** PHOSPHORODITHIOIC ACID, ZINC SALT**TOXICITY DATA with REFERENCE:**

orl-rbt LDLo:2130 mg/kg AEHLAU 6,324,63

CONSENSUS REPORTS: Zinc and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of SO_x, ZnO, and PO_x. See also ZINC COMPOUNDS.**ZGS100 CAS: 15954-98-0 HR: 3****ZINC(II) EDTA COMPLEX**mf: C₁₀H₁₆N₂O₈Zn mw: 357.65**SYN:** ACETIC ACID, (ETHYLENEDINITRILO)TETRA-, ZINC(II) COMPLEX**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:85 mg(Zn)/kg PABIAQ 11,853,63

SAFETY PROFILE: Poison by intraperitoneal route. An experimental teratogen. When heated to decomposition it emits toxic fumes of NO_x and Zn.**ZGW100 CAS: 3851-22-7 HR: 3****ZINC ETHOXIDE**mf: C₄H₁₀O₂Zn mw: 155.51**PROP:** Non-volatile white solid. Insol in EtOH.
Zn(OCH₂CH₃)₂**CONSENSUS REPORTS:** Zinc and its compounds are on The Community Right-To-Know List.**SAFETY PROFILE:** Mixtures with nitric acid may explode at room temperature. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS.**ZGW200 CAS: 12519-36-7 HR: 3****ZINC ETHYLENEDIAMINETETRAACETATE**mf: C₁₀H₁₂N₂O₈Zn mw: 353.61**SYNS:** BUNDOLIN CORRECTOR ZN 14R □ EDTA-ZINC □ EDTA-ZINC COMPLEX □ EDTA ZINC SALT □ (ETHYLENEDIAMINETETRAACETATO)ZINCATE(2-) □ ZINCATE(2-), ((ETHYLENEDINITRILO)TETRAACETATO)- □ ZINCATE(2-), ((N,N'-1,2-ETHANEDIYLBIS(N-(CARBOXYMETHYL)GLYCINATO)) (4-)-N,N'O,O',ON,ON')-, (OC-6-21)- □ ZINC-EDTA □ ZINC-EDTA COMPLEX**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:85 mg(Zn)/kg PABIAQ 11,853,63

SAFETY PROFILE: A poison by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO_x and Zn.**ZHA000 CAS: 14634-93-6 HR: D****ZINC ETHYLPHENYLTHIOCARBAMATE**mf: C₁₈H₂₀N₂S₄Zn mw: 458.01

PROP: White powder. Mp: 195°, d: 1.46–1.50 Sol in chloroform and benzene. Insol in gasoline, ethyl acetate and water.

SYNS: ACCELERATOR EFK □ BIS(N-ETHYLDITHIO-CARBANILATO)ZINC □ BIS(ETHYLPHENYLCARBAMO-DITHIOATO-S,S')-(T-4)-ZINC □ HERMAT FEDK □ VULKACIT P EXTRA N □ ZINC ETHYLPHENYLDITHIOCARBAMATE

TOXICITY DATA with REFERENCE:

mno-sat 100 µg/plate MUREAV 68,313,79

mma-sat 100 µg/plate PCBRD2 141,407,84

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

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

ZHJ000 CAS: 14881-92-6 HR: 2
ZINC-N-FLUOREN-2-YLACETOHYDROXAMATE

mf: C₃₀H₂₄N₂O₄•Zn mw: 541.93

SYNS: N-FLUOREN-2-YLACETOHYDROXAMIC ACID, ZINC COMPLEX □ N-HYDROXY-2-ACETYLAMINOFLUORENE, ZINC CHELATE

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

SAFETY PROFILE: Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic fumes of NO_x and ZnO. See also ZINC COMPOUNDS.

ZHS000 CAS: 7783-49-5 HR: 3
ZINC FLUORIDE

mf: F₂Zn mw: 103.37

PROP: Tetragonal needles or white crystalline mass. D: 5.00 @ 25°, mp: 872°, bp: 1500°, vap press: 1 mm @ 970°. Sltly sol in aq HF; sol in HCl, HNO₃, and NH₄OH.

SYN: ZINC FLUORURE (FRENCH)

TOXICITY DATA with REFERENCE:

scu-frg LDLo:280 mg/kg CRSBAW 124,133,37

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

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 subcutaneous route. Can react violently with potassium. A fluorination agent. When heated to decomposition it emits toxic fumes of F⁻ and ZnO. See also FLUORIDES and ZINC COMPOUNDS.

ZIA000 CAS: 16871-71-9 HR: 3
ZINC FLUOSILICATE

DOT: UN 2855

mf: F₆Si•Zn mw: 207.46

PROP: Hexagonal white crystals. Sol in water and inorganic acid.

SYNS: FUNGOL □ FUNGONIT GF 2 □ SILICON ZINC FLUORIDE □ ZINC FLUOROSILICATE □ ZINC FLUOROSILICATE (DOT) □ ZINC HEXAFLUOROSILICATE

TOXICITY DATA with REFERENCE:

orl-rat LDLo:100 mg/kg NCNSA6 5,28,53

scu-frg LDLo:280 mg/kg CRSBAW 124,133,37

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

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: TWA 2.5 mg(F)/m³

DOT CLASSIFICATION: 6.1; Label: KEEP AWAY FROM FOOD

SAFETY PROFILE: Poison by ingestion and subcutaneous routes. When heated to decomposition it emits toxic fumes of F⁻ and ZnO. See also ZINC COMPOUNDS.

ZIA750 CAS: 4468-02-4 HR: 1
ZINC GLUCONATE

mf: C₁₂H₂₂O₄Zn mw: 295.71

PROP: White granular or crystalline powder. Sol in water; very sltly sol in alc.

SYN: ZINC,((BIS(d-GLUCONATO-O¹),O²))- (9CI)

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

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

ZIJ000 CAS: 14018-82-7 HR: 3
ZINC HYDRIDE

mf: H₂Zn mw: 67.39

PROP: White non-volatile solid, readily oxidized. Insol in Et₂O.

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

SAFETY PROFILE: May ignite spontaneously in air. Violent reaction with aqueous acids. Slow reaction with water. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS and HYDRIDES.

ZIJ100 CAS: 7779-86-4 HR: 3
ZINC HYDROSULFITE

DOT: UN 1931

mf: O₄S₂•Zn mw: 193.49

PROP: White amorphous. Sol in water. Wood pulp bleach.

SYNS: DITHIONOUS ACID, ZINC SALT (1:1) □ ZINC DITHIONITE □ ZINC DITHIONITE (DOT) □ ZINC HYDROSULFITE

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

DOT CLASSIFICATION: 9; Label: None

SAFETY PROFILE: Probably a poison. When heated to decomposition it emits toxic vapors of zinc and SO_x.

**ZIJ300 CAS: 127-82-2 HR: 3
ZINC *p*-HYDROXYBENZENE-SULFONATE**mf: $C_{12}H_{12}O_8S_2 \cdot Zn$ mw: 413.73**PROP:** White to slightly off-white odorless granules. D: > 1, mp: 125°. Sol in water: 62.5g in 100g water @ 20°.**SYNS:** BENZENESULFONIC ACID, *p*-HYDROXY-, ZINC SALT (2:1) □ BENZENESULFONIC ACID, 4-HYDROXY-, ZINC SALT (2:1) □ *p*-HYDROXYBENZENESULFONIC ACID ZINC SALT □ 1-PHENOL-4-SULFONIC ACID ZINC SALT □ PHENOZIN □ ZINC PHENOLSULFONATE □ ZINC *p*-PHENOL SULFONATE □ ZINC SULFOCARBOLATE □ ZINC SULFOPHENATE**TOXICITY DATA with REFERENCE:**eye-rbt 3 mg MOD JACTDZ 5(5),373,86
orl-rat LD50:1800 mg/kg JACTDZ 5(5),373,86
orl-mus LD50:3 g/kg JACTDZ 5(5),373,86
ipr-mus LD50:225 mg/kg JACTDZ 5(5),373,86**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by intraperitoneal route. Moderately toxic by ingestion. An eye irritant. When heated to decomposition it emits toxic vapors of SO_x and fumes of zinc.**ZIS000 CAS: 3030-80-6 HR: 2
ZINC MERCAPTOBENZIMIDAZOLE**mf: $C_{14}H_{12}N_4S_2 \cdot Zn$ mw: 365.79**PROP:** Grayish white or light yellow powder. Decomp point: 270C.**SYNS:** ALTERUNGSSCHUTZMITTEL ZMB □ ANTIOXIDANT ZMB □ BIS(MERCAPTOBENZIMIDAZOLATO)ZINC □ MERCAPTOBENZIMIDAZOLE ZINC SALT □ 2-MERCAPTOBENZIMIDAZOLE ZINC SALT (2:1) □ ZINC BENZIMIDAZOLE-2-THIOLATE □ ZINC BIS(1H-BENZIMIDAZOLE-2-THIOLATE) □ ZINC MERCAPTOBENZIMIDAZOLATE**TOXICITY DATA with REFERENCE:**orl-rat LD50:540 mg/kg HYSAAV 31,183,66
orl-mus LD50:860 mg/kg HYSAAV 31,183,66**CONSENSUS REPORTS:** Zinc and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x , SO_x , and ZnO. See also ZINC COMPOUNDS and MERCAPTANS.**ZJA000 CAS: 22323-45-1 HR: 3
ZINC MERCURY CHROMATE COMPLEX**mf: $7ZnO \cdot 2HgO \cdot 2CrO_3 \cdot 7H_2O$ mw: 1328.91**SYNS:** CHROMIC ACID, MERCURY ZINC COMPLEX □ EXPERIMENTAL FUNGICIDE 224 (UNION CARBIDE) □ MERCURY ZINC CHROMATE COMPLEX**TOXICITY DATA with REFERENCE:**

orl-rat LD50:630 mg/kg 28ZEAL 4,393,69

CONSENSUS REPORTS: Zinc, mercury, chromium, and their compounds are on the Community Right-To-Know List.**OSHA PEL:** CL 0.1 mg(CrO_3)/m³**ACGIH TLV:** TWA 0.05 mg(Cr)/m³; Confirmed Human Carcinogen**DFG MAK:** Animal Carcinogen, Suspected Human Carcinogen**NIOSH REL:** (Chromium): TWA 0.001 mg(Cr)/m³; (Mercury, Aryl and Inorganic) CL 0.1 mg/m³ (skin)**SAFETY PROFILE:** Confirmed carcinogen.

Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of Hg and ZnO. See also MERCURY COMPOUNDS, ZINC COMPOUNDS, and CHROMIUM COMPOUNDS.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Chromium Hexavalent 7024.**ZJA100 CAS: 56329-42-1 HR: D
ZINC METHIONINE SULFATE****PROP:** White powder. Freely sol in water.**SAFETY PROFILE:** When heated to decomposition it emits very toxic fumes of SO_x .**ZJJ000 CAS: 7779-88-6 HR: 3
ZINC NITRATE****DOT:** UN 1514mf: $N_2O_6 \cdot Zn$ mw: 189.39**PROP:** A: needles; B: tetragonal, colorless crystals; A: trihydrate; B: hexahydrate; d: (B) 2.065 @ 14°; mp: (A) 42.5°; mp: (B) 36.4°; bp: (B) loses 6H₂O @ 105–131°. Very sol in alc; sol in water.**SYNS:** NITRATE de ZINC (FRENCH) □ NITRIC ACID, ZINC SALT**CONSENSUS REPORTS:** Zinc and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.**DOT CLASSIFICATION:** 5.1; Label: Oxidizer**SAFETY PROFILE:** A powerful oxidizer. Can react violently with C, Cu, metal sulfides, organic matter, P, S. When heated to decomposition it emits toxic fumes of NO_x and ZnO. See also NITRATES and ZINC COMPOUNDS.**ZJJ200 HR: 1
ZINC NITRILOTRIMETHYLPHOSPHONIC ACID
TRISODIUM TETRAHYDRATE**mf: $C_3H_6NO_9P_3Zn \cdot 3Na \cdot 4H_2O$ mw: 499.43**SYN:** NITRILOTRIMETHYLPHOSPHONIC ACID ZINC complex TRISODIUM TETRAHYDRATE**TOXICITY DATA with REFERENCE:**orl-rat LD50:21 g/kg GISAAA 49(11),73,84
orl-mus LD50:16,500 mg/kg GISAAA 49(11),73,84
orl-gpg LD50:27 g/kg GISAAA 49(11),73,84**CONSENSUS REPORTS:** Zinc and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Mildly toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x , PO_x , Na_2O , and ZnO. See also ZINC COMPOUNDS.**ZJJ400 CAS: 14709-62-7 HR: 3
ZINC NITROSYLPENTACYANOFERRATE**mf: $C_5FeN_6O \cdot Zn$ mw: 281.33**SYNS:** PENTACYANONITROSYLFERRATE ZINC □ ZINC PENTACYANONITROSYLFERRATE(2-)**TOXICITY DATA with REFERENCE:**orl-rat LD50:125 mg/kg ARZNAD 24,308,74
ipr-rat LD50:11 mg/kg ARZNAD 24,308,74
orl-mus LD50:56 mg/kg ARZNAD 24,308,74

ipr-mus LD50:10,800 µg/kg ARZNAD 24,308,74
 ivn-dog LDLo:24,760 µg/kg ARZNAD 24,308,74
 ivn-rbt LDLo:5500 µg/kg ARZNAD 24,308,74

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

SAFETY PROFILE: Poison by ingestion, intravenous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO_x, CN⁻, and ZnO. See also ZINC COMPOUNDS and CYANIDE.

ZJS000 CAS: 557-07-3 HR: 2
ZINC OLEATE (1:2)

mf: C₃₆H₆₈O₄•Zn mw: 630.41

PROP: White, dry, greasy powder. Insol in water; sol in alc, ether, carbon disulfide, benzene, pet ether.

SYN: OLEIC ACID, ZINC SALT

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

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS.

ZJS300 CAS: 8066-21-5 HR: 1
ZINCOP

SYNS: BI-CURVAL □ COPPER LONACOL □ COPPER OXYCHLORIDE-ZINEB mixture □ COPRAMAT □ CUPROCIN □ CUPROZAN □ CYNKOMIEDZIAN □ KHOMECEIN □ KHOMEZIN □ KUPROTSIN □ LUNACOL □ MILTOX □ N 2038 □ NEW BLITANE □ POLYCHOM □ POLYCHOME □ THIOZIN □ TIOXIN □ ZIKHOM □ ZINEB-COPPER OXYCHLORIDE mixture

TOXICITY DATA with REFERENCE:

orl-rat LD50:4430 mg/kg GISAAA 49(2),32,84
 orl-mus LD50:5250 mg/kg GISAAA 49(2),32,84
 orl-rbt LD50:8700 mg/kg GISAAA 49(2),32,84

CONSENSUS REPORTS: Zinc, copper, and their compounds are on the Community Right-To-Know List.

SAFETY PROFILE: Mildly toxic by ingestion. When heated to decomposition it emits toxic fumes of ZnO and SO_x. See also

ETHYLENEBIS(DITHIOCARBAMATO)ZINC (zineb), ZINC COMPOUNDS, CARBAMATES, and COPPER COMPOUNDS.

ZJS400 CAS: 7779-90-0 HR: 2
ZINC ORTHOPHOSPHATE

mf: H₃O₄P•3/2Zn mw: 386.05

SYNS: BONDERITE 40 □ BONDERITE 880 □ C.I. 77964 □ C.I. PIGMENT WHITE 32 □ DELAPHOS □ DELAPHOS 2M □ FLECK'S EXTRAORDINARY CEMENT □ GRANODINE 16NC □ GRANODINE 80 □ HEUCOPHOS ZP 10 □ J 0852 □ LF BOWSEI PW 2 □ LF-PW 2 □ MICROPHOS 90 □ NEUTRAL ZINC PHOSPHATE □ PHOSPHINOX PZ 06 □ PIGMENT WHITE 32 □ SICOR ZNP/M □ SICOR ZNP/S □ TRIBASIC ZINC PHOSPHATE □ TRIZINC DIPHOSPHATE □ VIRCHEM 931 □ WEATHER COAT 1000 □ ZINC ACID PHOSPHATE □ ZINC PHOSPHATE (3:2) □ ZP-SB □ ZPF

TOXICITY DATA with REFERENCE:

ipr-mus LD50:552 mg/kg GISAAA 47(8),23,1982

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

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

ZKA000 CAS: 1314-13-2 HR: 3
ZINC OXIDE

mf: OZn mw: 81.37

PROP: Odorless, white or yellowish powder. Hexagonal white crystals. Mp: >1800°, d: 5.47. Insol in water and alc; sol in dil acetic or mineral acids, ammonia. IDLH 500 mg/m³.

SYNS: AKRO-ZINC BAR 85 □ AMALOX □ AZO-33 □ AZODOX-55 □ CALAMINE (spray) □ CHINESE WHITE □ C.I. 77947 □ C.I. PIGMENT WHITE 4 □ CYNKU TLENEK (POLISH) □ EMANAY ZINC OXIDE □ EMAR □ FELLING ZINC OXIDE □ FLOWERS of ZINC □ GREEN SEAL-8 □ HUBBUCK'S WHITE □ KADOX-25 □ K-ZINC □ OZIDE □ OZLO □ PASCO □ PERMANENT WHITE □ PHILOSOPHER'S WOOL □ PROTOX TYPE 166 □ RED-SEAL-9 □ SNOW WHITE □ WHITE SEAL-7 □ ZINCITE □ ZINCOID □ ZINC OXIDE FUME (MAK) □ ZINC WHITE

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H MLD 28ZPAK -,10,72
 eye-rbt 500 mg/24H MLD 28ZPAK -,10,72
 dnd-esc 3000 ppm MUREAV 89,95,81
 cyt-rat-ihl 100 µg/m³ CYGEDX 12(3),46,78
 orl-hmn LDLo:500 mg/kg YAKUD5 22,291,80
 ihl-hmn TCLo:600 mg/m³:PUL JIDHAN 9,88,27
 ipr-rat LD50:240 mg/kg ZDKAA8 38(9),18,78
 orl-mus LD50:7950 mg/kg GISAAA 51(4),89,86
 ihl-mus LC50:2500 mg/m³ IPSTB3 3,93,76

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

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

ACGIH TLV: TWA 2 mg/m³; STEL 10 mg/m³; respirable fraction

DFG MAK: 1.5 mg/m³

NIOSH REL: TWA (Zinc Oxide) 5 mg/m³; CL 15 mg/m³/15M

SAFETY PROFILE: Moderately toxic to humans by ingestion. Poison experimentally by intraperitoneal route. An experimental teratogen. Other experimental reproductive effects. Human systemic effects by inhalation of freshly formed fumes: metal fume fever with chills, fever, tightness of chest, cough, dyspnea, and other pulmonary changes. Mutation data reported. A skin and eye irritant. Has exploded when mixed with chlorinated rubber. Violent reaction with Mg, linseed oil. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS.

ANALYTICAL METHOD: For occupational chemical analysis use OSHA: #ID-143 or NIOSH: Zinc, 7030; Zinc Oxide, 7502.

ZKJ000 CAS: 8051-03-4 HR: 1
ZINC OXIDE (ointment)

TOXICITY DATA with REFERENCE:

skn-hmn 300 µg/3D-I MLD 85DKA8 -,127,77

CONSENSUS REPORTS: Zinc and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** A skin irritant. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC OXIDE and ZINC COMPOUNDS.**ZKS000 CAS: 65979-81-9 HR: 3
ZINC PANTOTHENATE**mf: C₁₈H₃₂N₂O₁₀•Zn mw: 501.89**SYNS:** (T-4-(R)(R)-BIS(N-(2-DIHYDROXY-3,3-DIMETHYL)-1-OXOBUTYL-β-ALANIN-ATO)ZINC □ (R)-N-(2,4-DIHYDROXY-3,3-DIMETHYLBUTYRYL)-β-ALANINE ZINC SALT (2:1) □ PANTOTHENATE de ZINC (FRENCH) □ PANTOTHENIC ACID, ZINC SALT**TOXICITY DATA with REFERENCE:**

orl-rat LD50:3763 mg/kg DCPBB 13,611,79

ipr-rat LD50:489 mg/kg DCPBB 13,611,79

orl-mus LD50:2161 mg/kg DCPBB 13,611,79

ipr-mus LD50:342 mg/kg DCPBB 13,611,79

CONSENSUS REPORTS: Zinc and its compounds are on the Community Right-To-Know List.**SAFETY PROFILE:** Poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO_x and ZnO. See also ZINC COMPOUNDS.**ZKS100 CAS: 10025-64-6 HR: 3
ZINC PERCHLORATE HEXAHYDRATE**mf: Cl₂O₈•Zn•6H₂O mw: 372.39**SYN:** PERCHLORIC ACID, ZINC SALT, HEXAHYDRATE**TOXICITY DATA with REFERENCE:**

ipr-mus LDLo:76 mg/kg JAFCAU 14,512,66

DOT CLASSIFICATION: 5.1; Label: Oxidizer**SAFETY PROFILE:** A poison by intraperitoneal route. An oxidizer. When heated to decomposition it emits toxic vapors of zinc and Cl⁻.**ZLA000 CAS: 23414-72-4 HR: 3
ZINC PERMANGANATE****DOT:** UN 1515mf: Mn₂O₈•Zn mw: 303.25**PROP:** Violet-brown or black, hygroscopic crystals.**CONSENSUS REPORTS:** Zinc, manganese, and their compounds are on the Community Right-To-Know List.**ACGIH TLV:** TWA 0.03 mg(Mn)/m³**DOT CLASSIFICATION:** 5.1; Label: Oxidizer**SAFETY PROFILE:** Probably a skin, eye, and mucous membrane irritant. Flammable by chemical reaction with reducing agents. A powerful oxidizing agent. When heated to decomposition it emits toxic fumes of ZnO. Used as an antiseptic. See also MANGANESE COMPOUNDS and ZINC COMPOUNDS.**ZLJ000 CAS: 1314-22-3 HR: 3
ZINC PEROXIDE****DOT:** UN 1516mf: O₂Zn mw: 97.37**PROP:** Odorless, fairly unstable, yellow-white powder. D: 1.571 (theoretical). Decomp @ >150°. Sol in dil acids.**SYN:** ZINC SUPEROXIDE**CONSENSUS REPORTS:** Zinc and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.**DOT CLASSIFICATION:** 5.1; Label: Oxidizer**SAFETY PROFILE:** Systemic toxicity is similar to zinc oxide. Flammable when exposed to heat or by chemical reaction with reducing materials. Finely divided powder is slightly soluble in water, decomposes rapidly at 150°. A powerful oxidizer and dangerous when mixed with highly combustible materials. A very dangerous explosion hazard when exposed to heat. Explodes at 212°. Can react violently with Al and Zn. Very dangerous, will react with water or steam to produce heat. Vigorous reaction with reducing materials. When heated to decomposition it emits toxic fumes of ZnO. See also PEROXIDES and ZINC COMPOUNDS.**ZLJ100 CAS: 16561-55-0 HR: D
ZINC-o-PHENANTHROLINE COMPLEX**mf: C₁₂H₈N₂•Zn mw: 245.59**SYNS:** ZINC-1,10-PHENANTHROLINE COMPLEX □ ZINC(2+), (1,10-PHENANTHROLINE-N1,N10)- □ (1,10-PHENANTHROLINE)ZINC(2+) □ ZINC(2+), (1,10-PHENANTHROLINE)-, ION □ ZINC, COMPLEX WITH 1,10-PHENANTHROLINYLENE**SAFETY PROFILE:** Experimental reproductive effects. When heated to decomposition it emits toxic vapors of NO_x and Zn.**ZLS000 CAS: 1314-84-7 HR: 3
ZINC PHOSPHIDE****DOT:** UN 1714mf: P₂Zn₃ mw: 258.05**PROP:** Cubic, dark-gray, tetragonal crystals or powder with faint phosphorus odor. Stable when dry. Mp: 420°, bp: 1100°, d: 4.55 @ 13°. Insol in water, alc; sol in benzene, carbon disulfide.**SYNS:** BLUE-OX □ KILRAT □ MOUS-CON □ PHOSPHURE de ZINC (FRENCH) □ PHOSVIN □ RCRA WASTE NUMBER P122 □ RUMETAN □ ZINCO (FOSFURO di) (ITALIAN) □ ZINC (PHOSPHURE de) (FRENCH) □ ZINC-TOX □ ZINKFOSFIDE (DUTCH) □ ZINKPHOSPHID (GERMAN) □ ZP**TOXICITY DATA with REFERENCE:**

orl-wmn LDLo:80 mg/kg:GIT ZACCAL 23,144,48

orl-rat LD50:12 mg/kg MAGJAL 52(2),166,79

orl-mus LD50:40 mg/kg YKYUA6 31,1247,80

orl-cat LDLo:250 mg/kg JAPMA8 42,468,52

ipr-rat LD50:450 mg/kg GTPZAB 31(9),24,87

orl-mus LD50:40 mg/kg YKYUA6 31,1247,80

ipr-mus LD50:263 mg/kg GTPZAB 31(9),24,87

orl-dom LD50:60 mg/kg PEMNDP 9,865,91

orl-rbt LDLo:40 mg/kg JAPMA8 42,468,52

orl-bwd LD50:23,700 µg/kg AEECTCV 12,355,83

CONSENSUS REPORTS: EPA Extremely Hazardous Substances List. Zinc and its compounds are on the Community Right-To-Know List. Reported in EPA TSCA Inventory.**DOT CLASSIFICATION:** 4.3; Label: Dangerous When Wet, Poison**SAFETY PROFILE:** Human poison by ingestion causing nausea, vomiting, death. Flammable when exposed to heat or flame. This material is stable while kept

dry. In moist air, it decomposes slowly. Reacts violently with acids or acid fumes to emit the highly toxic and flammable phosphine. Violent reaction with concentrated sulfuric acid, nitric acid, and oxidizing materials. Incompatible with HCl, H₂SO₄. When heated to decomposition it emits toxic fumes of PO_x and ZnO. Used as an acute rodenticide. See also PHOSPHIDES and ZINC COMPOUNDS.

ZLS200 CAS: 14332-59-3 HR: 2

ZINC PHOSPHITE

mf: H₃O₃P•Zn mw: 147.37

SYNS: NERA □ NERA EMULZE (CZECH) □ SECONDARY ZINC PHOSPHITE

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg/24H SEV 28ZPAK -,285,72
eye-rbt 20 mg/24H MOD 28ZPAK -,285,72
orl-rat LD50:506 mg/kg
28ZPAK -,285,72

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

SAFETY PROFILE: Moderately toxic by ingestion. An eye and severe skin irritant. When heated to decomposition it emits toxic fumes of PO_x and ZnO. See also ZINC COMPOUNDS.

ZMA000 CAS: 12071-83-9 HR: 2
ZINC (N,N'-PROPYLENE-1,2-BIS(DITHIOCARB-AMATE))

mf: (C₅H₈N₂S₄Zn)_x

SYNS: AIRONE □ ANTRACOL □ BAY 46131 □ BAYER 46131 □ LH 3012 □ LH 30/Z □ ((1-METHYL-1,2-ETHANEDIYL)-BIS(CARBAMODITHIOATO))(2-)ZINC HOMOPOLYMER □ METHYL ZINEB □ MEZINEB □ PROPINEB □ PROPINEBE □ PROPYLENEBIS(DITHIOCARBAMATO)ZINC □ TAIFEN □ TSIPROMAT (RUSSIAN) □ ZINK-(N,N'-PROPYLEN-1,2-BIS(DITHIOCARBAMAT)) (GERMAN) □ ZIPROMAT

TOXICITY DATA with REFERENCE:

mrc-smc 2500 ppm MUREAV 10,533,70
cyt-rat-par 2600 mg/kg/5D-I PRKHDK 4,151,79
orl-rat LD50:8500 mg/kg FMCHA2 -,C198,83
orl-rbt LD50:2500 mg/kg 85GYAZ -,123,71

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

SAFETY PROFILE: Moderately toxic by ingestion. An experimental teratogen. Other experimental reproductive effects. Mutation data reported. When heated to decomposition it emits very toxic fumes of NO_x, SO_x and ZnO. Used as a fungicide. See also ETHYLENEBIS(DITHIOCARBAMATO)ZINC (zineb), ZINC COMPOUNDS, and CARBAMATES.

ZMJ000 CAS: 13463-41-7 HR: 3

ZINC PYRIDINE-2-THIOL-1-OXIDE

mf: C₁₀H₈N₂O₂S₂•Zn mw: 317.69

PROP: White solid. Mp: 262°. Sol in DMSO, DMF, and CHCl₃.

SYNS: BIS(1-HYDROXY-2(1H)-PYRIDINETHIONATO)ZINC □ BIS(2-PYRIDYLTHIO)ZINC, 1,1'-DIOXIDE □ OM-1563 □ OMADINE ZINC □ 2-PYRIDINETHIOL-1-OXIDE, ZINC SALT □ PYRITHIONE ZINC □ VANCIDE P □ ZINC OMADINE □

ZINCPOLYANEMINE □ ZINC PT □ ZINC PYRIDINETHIONE □ ZINC PYRION □ ZINC PYRITHIONE

TOXICITY DATA with REFERENCE:

eye-rbt 1 mg/48H JANCA2 56,905,73
orl-rat LD50:177 mg/kg TOANDB 3,1,79
orl-mus LD50:160 mg/kg CTOXAO 13,1,78
ipr-mus LD50:26,800 µg/kg OYYAA2 8,1067,74
scu-mus LD50:730 mg/kg CTOXAO 13,1,78
orl-dog LD50:600 mg/kg CTOXAO 13,1,78
ivn-dog LDLo:25 mg/kg TXAPA9 9,269,66
ivn-mky LDLo:25 mg/kg TXAPA9 9,269,66
skn-rbt LD50:100 mg/kg YKYUA6 32,965,81
ivn-rbt LDLo:10 mg/kg TXAPA9 9,269,66

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

SAFETY PROFILE: Poison by ingestion, skin contact, intraperitoneal, and intravenous routes. Moderately toxic by subcutaneous route. An experimental teratogen. Experimental reproductive effects. An eye irritant. When heated to decomposition it emits very toxic fumes of NO_x, SO_x, and ZnO. Used as an anti-dandruff agent in shampoos. See also ZINC COMPOUNDS and SULFIDES.

ZMJ100 HR: D

ZINC RESINATE

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

ZMS000 CAS: 557-05-1 HR: 3

ZINC STEARATE

mf: Zn(C₁₈H₃₅O₂)₂ mw: 632.30

PROP: White powder. Mp: 130°, flash p: 530°F (OC), autoign temp: 790°F. Insol in water, alc, ether; sol in benzene. Decomps in dil acids.

SYNS: DIBASIC ZINC STEARATE □ OCTADECANOIC ACID, ZINC SALT □ STEARIC ACID, ZINC SALT □ ZINC DISTEARATE □ ZINC OCTADECANOATE

TOXICITY DATA with REFERENCE:

itr-rat LDLo:250 mg/kg BJIMAG 15,130,58

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

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

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

SAFETY PROFILE: Poison by intratracheal route. Inhalation of zinc stearate has been reported as causing pulmonary fibrosis. A nuisance dust. Combustible when exposed to heat or flame. To fight fire, use water, foam, CO₂, dry chemical. When heated to decomposition it emits toxic fumes of ZnO. See also ZINC COMPOUNDS.

ZNA000 CAS: 7733-02-0 HR: 3

ZINC SULFATE

mf: O₄S•Zn mw: 161.43

PROP: Rhombic, colorless crystals or crystalline powder. Mp: decomp @ 740°, d: 3.74 @ 15°. Sol in water; almost insol in alc.

SYNS: BONAZEN □ BUFOPTO ZINC SULFATE □ OP-THAL-ZIN □ SULFATE de ZINC (FRENCH) □ SULFURIC ACID, ZINC SALT (1:1) □ VERAZINC □ WHITE COPPERAS □ WHITE VITRIOL □ ZINC SULPHATE □ ZINC VITRIOL □ ZINKOSITE

TOXICITY DATA with REFERENCE:

eye-rbt 420 µg MOD JAPMA8 45,474,56
mmo-smc 100 mmol/L MUREAV 117,149,83
otr-ham:emb 200 µmol/L CNREA8 39,193,79
orl-hmn TDL₀:45 mg/kg/7D-C:CVS,GIT,BLD BMJOAE 1,754,78
orl-hmn TDL₀:106 mg/kg:CVS,PUL,GIT BMJOAE 1,139,77
orl-man TDL₀:180 mg/kg/6W-I:BLD JAMAAP 252,1443,84
orl-wmn TDL₀:3120 mg/kg/43W-I:BLD,SYS GASTAB 94,508,88
orl-rat LD₅₀:2949 mg/kg TOERD9 1,371,78
scu-rat LDLo:330 mg/kg EQSSDX 1,1,75
ivn-rat LDLo:50 mg/kg EQSSDX 1,1,75
orl-mus LD₅₀:57 mg/kg IPSTB3 3,93,76
ipr-mus LD₅₀:71,750 µg/kg COREAF 256,1043,63
scu-mus LDLo:1500 µg/kg TJIZAF 48,313,78
scu-dog LDLo:78 mg/kg EQSSDX 1,1,75
ivn-dog LDLo:66 mg/kg EQSSDX 1,1,75

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

SAFETY PROFILE: Poison by ingestion, intraperitoneal, subcutaneous, and intravenous routes. Human systemic effects by ingestion: acute pulmonary edema, agranulocytosis, blood pressure decrease, diarrhea and other gastrointestinal changes, hypermotility, increased pulse rate without blood pressure decrease, level changes for metals other than Na/K/Fe/Ca/P/Cl, microcytosis with or without anemia, normocytic anemia. Experimental teratogenic and reproductive effects. Questionable carcinogen with experimental tumorigenic data. Human mutation data reported. An eye irritant. When heated to decomposition it emits toxic fumes of SO_x and ZnO. See also SULFATES and ZINC COMPOUNDS.

ZNJ000 CAS: 7446-20-0 HR: 3 ZINC SULFATE HEPTAHYDRATE (1:1:7)

mf: O₄SZn•7H₂O mw: 287.57

PROP: Colorless, odorless, orthorhombic crystals or crystalline powder from water. D: 1.97, mp: 100°. Decomp @ >500°. Insol in alc, glycerin.

SYNS: SULFURIC ACID, ZINC SALT (1:1), HEPTAHYDRATE □ WHITE VITRIOL □ ZINC SULFATE □ ZINC SULFATE (1:1) HEPTAHYDRATE □ ZINC VITRIOL

TOXICITY DATA with REFERENCE:

sln-dmg-orl 5 mmol/L MUREAV 90,91,81
dni-mus-ipr 20 g/kg ARGEAR 51,605,81
unr-man LDLo:221 mg/kg 85DCAI 2,73,70
orl-rat LD₅₀:2150 mg/kg ARTODN 54,275,83
scu-rat LDLo:330 mg/kg HBAMAK 4,1419,35
ivn-rat LDLo:49 mg/kg HBAMAK 4,1419,35
orl-mus LD₅₀:2200 mg/kg BSPBAD 116,47,77
ipr-mus LD₅₀:260 mg/kg BSPBAD 116,47,77

scu-dog LDLo:78 mg/kg HBAMAK 4,1419,35

ivn-dog LDLo:66 mg/kg HBAMAK 4,1419,35

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

SAFETY PROFILE: Human poison by an unspecified route. Poison experimentally by subcutaneous, intravenous, and intraperitoneal routes. Moderately toxic by ingestion. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of SO_x and ZnO. See also ZINC SULFATE.

ZNJ100 CAS: 1314-98-3 HR: 2 ZINC SULFIDE

mf: SZn mw: 97.43

SYNS: ALBALITH □ CLEARTRAN □ C.I. PIGMENT WHITE 7 □ IRTAN 2 □ PIGMENT WHITE 7 □ SACHTOLITH □ SACHTOLITH HD-S □ ZINC MONOSULFIDE □ ZINC SULPHIDE

TOXICITY DATA with REFERENCE:

orl-rat LD₅₀:>2 g/kg RCCRC* NOTOX1072/1332,89
ihl-rat LC₅₀:>5040 mg/m³/4H RCCRC* NOTOX1072,89
skn-rat LD₅₀:>2 g/kg RCCRC* NOTOX1072/1333,89

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Moderately toxic by ingestion, inhalation, and skin contact. When heated to decomposition it emits toxic vapors of Zn and SO_x.

ZNS000 CAS: 102916-22-3 HR: 3 ZINC TRIFLUOROSTANNITE, HEPTAHYDRATE

mf: F₆Sn₂•Zn•7H₂O mw: 542.89

TOXICITY DATA with REFERENCE:

ivn-mus LD₅₀:32 mg/kg CSLNX* NX#00132

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

OSHA PEL: TWA 2.5 mg(F)/m³; 2 mg(Sn)/m³

ACGIH TLV: TWA 2 mg(Sn)/m³; 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 intravenous route. When heated to decomposition it emits toxic fumes of F⁻ and ZnO. See also FLUORIDES, TIN COMPOUNDS, and ZINC COMPOUNDS.

ZNS200 HR: 3 ZINGIBER ROSEUM (Roxb.) Rosc., extract

PROP: Indian plant belonging to the family *Zingiberaceae* (IJEBA6 22,312,84).

TOXICITY DATA with REFERENCE:

ipr-mus LD₅₀:388 mg/kg IJEBA6 22,312,84

SAFETY PROFILE: Poison by intraperitoneal route. Experimental reproductive effects. When heated to decomposition it emits acrid smoke and irritating fumes.

ZNS300 CAS: 79561-61-8 HR: 2 (+)-ZINTEROL HYDROCHLORIDE

mf: C₁₉H₂₆N₂O₄S•ClH mw: 414.99

SYN: METHANESULFONAMIDE, N-(5-(2-((1,1-DIMETHYL-2-PHENYLETHYL)AMINO)-1-HYDROXYETHYL)-2-HYDROXYPHENYL)-, MONOHYDROCHLORIDE, (+)-

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic vapors of NO_x , SO_x , and HCl .

ZNS400 CAS: 171345-51-0 HR: 2
ZINTEVIR

SYNS: 5'-GTGGTGGGTGGGT-GGGT-3' □ AR177 □ DEOXYRIBONUCLEIC ACID, D(G-SP-T-G-G-T-G-G-G-T-G-G-T-G-G-SP-T) □ DEOXYRIBONUCLEIC ACID, D(P-THIO)(G-T-G-G-T-G-G-G-T-G-G-G-T-G-G-G-T) □ DNA, D(G-SP-T-G-G-T-G-G-T-G-G-G-T-G-G-SP-T) □ T30177

TOXICITY DATA with REFERENCE:

ivn-mus LDLo:1500 mg/kg TOSCF2 53,63,2000

ivn-mus LD50:1500 mg/kg TOSCF2 53,63,2000

SAFETY PROFILE: Moderately toxic by intravenous route. When heated to decomposition it emits toxic vapors of NO_x .

ZOA000 CAS: 7440-67-7 HR: 3
ZIRCONIUM

DOT: UN 1358/UN 1932/UN 2008/UN 2009/UN 2858

af: Zr aw: 91.224

PROP: A grayish-white, lustrous, metallic element; very sltly radioactive. Very resistant to corrosion but embrittled by N, O, and C. Oxidizes rapidly at 6°. Nitrided slowly at 700°. Mp: 1852°, bp: 4200°, d: 6.506 @ 20°. IDLH 50 mg/m³ (as Zr).

SYNS: ZIRCAT □ ZIRCONIUM (ACGIH,OSHA) □ ZIRCONIUM, dry, coiled wire, finished metal sheets, strip (UN 2858) (DOT) □ ZIRCONIUM, dry, finished sheets, strip or coiled wire (UN 2009) (DOT) □ ZIRCONIUM METAL, dry, chemically produced, finer than 20 mesh particle size (UN 2008) □ ZIRCONIUM POWDER, dry (UN 2008) (DOT) □ ZIRCONIUM POWDER, wetted with not <25% water (UN 1358) (DOT) □ ZIRCONIUM SCRAP (UN 1932) (DOT)

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³; Not Classifiable as a Human Carcinogen

ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 1 mg(Zr)/m³

DOT CLASSIFICATION: 4.1; Label: Flammable Solid (UN 2858, UN 1358); DOT Class: 4.2; Label: Spontaneously Combustible (UN 2008, UN 2009, UN 1932)

SAFETY PROFILE: A very dangerous fire hazard in the form of dust when exposed to heat or flame or by chemical reaction with oxidizers. May ignite spontaneously. A dangerous explosion hazard in the form of dust by chemical reaction with air, alkali hydroxides, alkali metal chromates, dichromates, molybdates, sulfates, tungstates, borax, CCl_4 , CuO , Pb , PbO , P , KClO_3 , KNO_3 , nitrylfluoride. Explosive range: 0.16 g/L in air. To fight fire, use special mixtures, dry chemical, salt, or dry sand. See also ZIRCONIUM COMPOUNDS.

ANALYTICAL METHOD: For occupational chemical analysis use NIOSH: Elements (ICP), 7300.

ZPA000 CAS: 10026-11-6 HR: 3

ZIRCONIUM CHLORIDE

DOT: UN 2503

mf: Cl_4Zr mw: 233.02

PROP: White solid; easily hydrolyzed; lustrous crystals. Mp: subl @ 437°, bp: 331°, d: 2.80, vap press: 1 mm @ 190°. IDLH 50 mg/m³ (as Zr).

SYNS: ZIRCONIUM(IV) CHLORIDE (1:4) □ ZIRCONIUM TETRACHLORIDE (DOT) □ ZIRCONIUM TETRACHLORIDE, solid (DOT)

TOXICITY DATA with REFERENCE:

orl-rat LD50:1688 mg/kg HYSAAV 31,328,66

orl-mus LD50:489 mg/kg JNPHAG 14,437,83

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³; Not Classifiable as a Human Carcinogen

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

DFG MAK: 1 mg(Zr)/m³

DOT CLASSIFICATION: 8; Label: Corrosive

SAFETY PROFILE: Moderately toxic by ingestion. A corrosive irritant to skin, eyes, and mucous membranes. Ignites spontaneously in air. When heated to decomposition it emits toxic fumes of Cl_2 . See also ZIRCONIUM COMPOUNDS and HYDROCHLORIC ACID.

ZPJ000 CAS: 10119-31-0 HR: 1
ZIRCONIUM CHLORIDE HYDROXIDE

mf: ClHOZr mw: 143.68

PROP: IDLH 50 mg/m³ (as Zr).

SYNS: ZIRCONIUM CHLOROXYDRATE □ ZIRCONIUM HYDROXYCHLORIDE □ ZIRCONYL HYDROXYCHLORIDE

TOXICITY DATA with REFERENCE:

skn-hmn 45 mg/3D-I MOD 85DKA8 -,127,77

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

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

ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 1 mg(Zr)/m³

SAFETY PROFILE: A human skin irritant. When heated to decomposition it emits toxic fumes of Cl_2 . Used as an antiperspirant. See also ZIRCONIUM COMPOUNDS and CHLORIDES.

ZPS000 CAS: 13520-92-8 HR: 2
ZIRCONIUM CHLORIDE OXIDE OCTAHYDRATE

mf: $\text{Cl}_2\text{OZr}\cdot 8\text{H}_2\text{O}$ mw: 322.28

PROP: IDLH 50 mg/m³ (as Zr).

SYN: ZIRCONYL CHLORIDE OCTAHYDRATE

TOXICITY DATA with REFERENCE:

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

ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³; Not Classifiable as a Human Carcinogen

DFG MAK: 1 mg(Zr)/m³

SAFETY PROFILE: Questionable carcinogen with experimental tumorigenic data. When heated to decomposition it emits toxic fumes of Cl_2 . See also ZIRCONIUM COMPOUNDS and CHLORIDES.

ZQA000**HR: 2****ZIRCONIUM COMPOUNDS****PROP:** IDLH 50 mg/m³ (as Zr).**OSHA PEL:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³**ACGIH TLV:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;

Not Classifiable as a Human Carcinogen

DFG MAK: (insoluble compounds) 1 mg(Zr)/m³

SAFETY PROFILE: Zirconium is not an important industrial poison; however, poisoning may occur due to excessive exposure to zirconium salts. Deaths in rabbits have been caused by intravenous injection of 150 mg/kg of body weight. Inhalation of ZrCl₄ (6 mg Zr/m³) for 60 days produces slight decreases in hemoglobin and red blood cell count in dogs and increases mortality in rats and guinea pigs. Most zirconium compounds in common use are insoluble and considered inert. Pulmonary granuloma in zirconium workers has been reported and sodium zirconium lactate has been held responsible for skin granulomas. Avoid inhalation of Zr-containing aerosols, which can cause lung granulomas. Zirconium-containing drugs or cosmetic products are being controlled by the FDA.

ZQB100**CAS: 24621-17-8****HR: 3****ZIRCONIUM DIBROMIDE**mf: Br₂Zr mw: 251.03**PROP:** Black powder or blue-black solid which disproportionates to Zr + ZrBr₄ above 40°.

SAFETY PROFILE: Ignites spontaneously in air. Violent reaction with water or steam. When heated to decomposition it emits toxic fumes of Br⁻. See also ZIRCONIUM COMPOUNDS and BROMIDES.

ZQC200**CAS: 12070-14-3****HR: 2****ZIRCONIUM DICARBIDE**mf: C₂Zr mw: 115.25

SAFETY PROFILE: Ignites in cold fluoride; chlorine (at 250°C); bromine (at 300°C); iodine (at 400°C). See also ZIRCONIUM COMPOUNDS.

ZQJ000**CAS: 13762-26-0****HR: 3****ZIRCONIUM DICHLORIDE**mf: Cl₂Zr mw: 162.13**PROP:** Black solid which disproportionates on heating to Zr + ZrCl₄. IDLH 50 mg/m³ (as Zr).**SYN:** ZIRCONIUM(II) CHLORIDE**OSHA PEL:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³**ACGIH TLV:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;

Not Classifiable as a Human Carcinogen

DFG MAK: 1 mg(Zr)/m³

SAFETY PROFILE: If warm, it ignites in air. When heated to decomposition it emits toxic fumes of Cl⁻. See also ZIRCONIUM COMPOUNDS and CHLORIDES.

ZQS000**CAS: 7783-64-4****HR: 3****ZIRCONIUM FLUORIDE**mf: F₄Zr mw: 167.22

PROP: Refractive crystals or white solid which readily sublimates; water-sol. D: 4.6 @ 16°, subl @ 600°. Very sol in HF. IDLH 50 mg/m³ (as Zr).

SYN: ZIRCONIUM TETRAFLUORIDE**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:98 mg/kg 19UQAS -30,65

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**OSHA PEL:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³**ACGIH TLV:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/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: 1 mg(Zr)/m³**NIOSH REL:** (Fluorides, Inorganic) 10H TWA 2.5 mg(F)/m³

SAFETY PROFILE: Poison by intravenous route. When heated to decomposition it emits toxic fumes of F⁻. See also ZIRCONIUM COMPOUNDS and FLUORIDES.

ZQS100**CAS: 70983-41-4****HR: 3****ZIRCONIUM GLUCONATE****PROP:** IDLH 50 mg/m³ (as Zr).**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:247 mg/kg NTIS** AEC-TR-6710

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**OSHA PEL:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³**ACGIH TLV:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;

Not Classifiable as a Human Carcinogen

SAFETY PROFILE: Poison by intraperitoneal route. When heated to decomposition it emits toxic fumes of Zr.

ZRA000**CAS: 7704-99-6****HR: 3****ZIRCONIUM HYDRIDE****DOT:** UN 1437mf: H₂Zr mw: 93.24**PROP:** Metallic dark-gray to black powder. D: 5.6, autoign temp: 270° (in air). IDLH 50 mg/m³ (as Zr).**TOXICITY DATA with REFERENCE:**

itr-rat TDLo:45 g/kg/26W-I GISAAA 37(7),36,72

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.**OSHA PEL:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³**ACGIH TLV:** TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;

Not Classifiable as a Human Carcinogen

DFG MAK: 1 mg(Zr)/m³**DOT CLASSIFICATION:** 4.1; Label: Flammable Solid

SAFETY PROFILE: A powerful reducing agent. Flammable when dry or wet. Very dangerous to handle; can explode. Incandesces when heated in air. See also HYDRIDES and ZIRCONIUM COMPOUNDS.

ZRJ000**CAS: 63919-14-2****HR: 2****ZIRCONIUM(III) LACTATE (1:3)**mf: C₉H₉O₉•H₄OZr mw: 372.44**PROP:** IDLH 50 mg/m³ (as Zr).**SYN:** LACTIC ACID, ZIRCONIUM SALT (3:1)**TOXICITY DATA with REFERENCE:**

skn-mus TDLo:20 µg/kg JAMAAP 190,940,64

ipr-rat LD50:670 mg/kg AIHAAP 24,131,63

OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³
ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen
DFG MAK: 1 mg(Zr)/m³
SAFETY PROFILE: Moderately toxic by intraperitoneal route. When heated to decomposition it emits acrid smoke and irritating fumes. See also ZIRCONIUM COMPOUNDS.

ZRS000 CAS: 60676-90-6 HR: 2
ZIRCONIUM(IV) LACTATE
 mf: Zr•C₃H₅O₃ mw: 180.30
PROP: White, sltly moist pulp. Very sltly sol in water and common org solvs; sol in aq alkali solns with the formation of salts. IDLH 50 mg/m³ (as Zr).
SYN: LACTIC ACID, ZIRCONIUM SALT (4:1)
TOXICITY DATA with REFERENCE:
 idr-man TDLo:170 µg/kg/I:SKN JIDEAE 38,223,62
OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³
ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen
DFG MAK: 1 mg(Zr)/m³
SAFETY PROFILE: Human systemic effects by intradermal route: after topical application causes primary irritation, allergic dermatitis, and is corrosive. Prolonged inhalation of dust has caused granulomas, interstitial pneumonia. A powerful skin allergen. See also ZIRCONIUM COMPOUNDS.

ZSA000 CAS: 13746-89-9 HR: 2
ZIRCONIUM NITRATE
DOT: UN 2728
 mf: N₄O₁₂•Zr mw: 339.26
PROP: White hygroscopic crystals. Very sol in water; sol in alc. IDLH 50 mg/m³ (as Zr).
SYN: DUSICNAN ZIRKONICITY (CZECH)
TOXICITY DATA with REFERENCE:
 orl-rat LD50:2290 mg/kg MarJ#V# 29MAR77
 ihl-rat LCLo:500 mg/m³/30M NTIS** AEC-TR-6710
CONSENSUS REPORTS: Reported in EPA TSCA Inventory.
OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³
ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen
DFG MAK: 1 mg(Zr)/m³
DOT CLASSIFICATION: 5.1; Label: Oxidizer
SAFETY PROFILE: Moderately toxic by inhalation and ingestion. A powerful oxidizer. When heated to decomposition it emits toxic fumes of NO_x. See also NITRATES and ZIRCONIUM COMPOUNDS.

ZSJ000 CAS: 7699-43-6 HR: 3
ZIRCONIUM OXYCHLORIDE
 mf: Cl₂OZr mw: 178.12
PROP: Crystals or white solid. Forms adducts by direct reaction in EtOH. D: 1.91. Very sol in water, alc. IDLH 50 mg/m³ (as Zr).
SYNS: BASIC ZIRCONIUM CHLORIDE □ CHLOROZIRCONYL □ DICHLOROOROZIRCONIUM □ NCI-C60811 □ ZIRCONYL CHLORIDE
TOXICITY DATA with REFERENCE:

orl-rat LD50:3500 mg/kg AIHOAX 1,637,50
 ipr-rat LD50:400 mg/kg AIHOAX 1,637,50
 scu-rat LDLo:500 mg/kg NTIS** AEC-TR-6710
 scu-rat LD50:1227 mg/kg JNPHAG 14,437,83
 ipr-mus LD50:335 mg/kg COREAF 256,1043,63
CONSENSUS REPORTS: Reported in EPA TSCA Inventory.
OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³
ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen
DFG MAK: 1 mg(Zr)/m³
SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion and subcutaneous routes. Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic fumes of Cl⁻. Used as an antiperspirant. See also ZIRCONIUM COMPOUNDS and CHLORIDES.

ZSS000 CAS: 14940-68-2 HR: 2
ZIRCONIUM(IV) SILICATE (1:1)
 mf: O₄SiZr mw: 183.31
PROP: Usually shades of brown, green, gray, yellow, and red, tetragonal, bipyramidal crystals. D: 4.56, mp: 2550°.
 IDLH 50 mg/m³ (as Zr).
SYNS: HYACINTH □ SILICIC ACID, ZIRCONIUM(4+) SALT (1:1) □ ZIRCON
CONSENSUS REPORTS: Reported in EPA TSCA Inventory.
OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³
ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen
DFG MAK: 1 mg(Zr)/m³
SAFETY PROFILE: See SILICATES and ZIRCONIUM COMPOUNDS.

ZTA000 CAS: 63904-82-5 HR: 2
ZIRCONIUM SODIUM LACTATE
 mf: C₉H₁₅NaO₁₀Zr mw: 397.45
PROP: Straw-colored liquid. D: 1.28. IDLH 50 mg/m³ (as Zr).
SYN: SODIUM HYDROGEN TRILACTATOZIRCONYLATE
TOXICITY DATA with REFERENCE:
OSHA PEL: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³
ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen
DFG MAK: 1 mg(Zr)/m³
SAFETY PROFILE: Inhalation produced bronchiolar abscesses, lobar pneumonia, and peribronchial granulomas experimentally. Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits acrid smoke and irritating fumes of Na₂O. See also ZIRCONIUM COMPOUNDS.

ZTJ000 CAS: 14644-61-2 HR: 3
ZIRCONIUM(IV) SULFATE (1:2)
DOT: NA 9163
 mf: O₈S₂•Zr mw: 283.34
PROP: Tetrahydrate, crystalline solid. IDLH 50 mg/m³ (as Zr).

SYNS: DISULFATOZIRCONIC ACID □ SULFURIC ACID, ZIRCONIUM(4+) SALT (2:1) □ ZIRCONYL SULFATE

TOXICITY DATA with REFERENCE:

dns-mus:lyms 20 µmol/L TOLED5 30,89,86
 orl-rat LD50:3500 mg/kg AIHOAX 1,637,50
 ipr-rat LD50:175 mg/kg AIHOAX 1,637,50
 scu-rat LDLo:500 mg/kg NTIS** AEC-TR-6710

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

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

ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen

DFG MAK: 1 mg(Zr)/m³

DOT CLASSIFICATION: 8; Label: Corrosive

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion and subcutaneous routes. A corrosive. Experimental reproductive effects. Mutation data reported. When heated to decomposition it emits toxic fumes of SO_x. See also SULFATES and ZIRCONIUM COMPOUNDS.

ZTK300 CAS: 23840-95-1 HR: 3
ZIRCONIUM(IV) TETRAHYDROBORATE

mf: B₄H₁₆Zr mw: 150.59

PROP: IDLH 50 mg/m³ (as Zr).

SAFETY PROFILE: Violent reaction with air. See also BORON COMPOUNDS and ZIRCONIUM COMPOUNDS.

ZTK400 CAS: 1291-32-3 HR: 3
ZIRCONOCENE, DICHLORIDE

mf: C₁₀H₁₀Cl₂Zr mw: 292.32

PROP: Colorless crystals. Mp: 248°. IDLH 50 mg/m³ (as Zr).

SYN: ZIRCONIUM, DICHLORO-DI- π -CYCLOPENTADIENYL-

TOXICITY DATA with REFERENCE:

mno-sat 333 µg/plate EMMUEG 11(Suppl 12),1,88
 ipr-rat LD50:30 mg/kg NCIBR* PH43-64-886,JUL68

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

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

ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen

SAFETY PROFILE: Poison by intraperitoneal route. Mutation data reported. When heated to decomposition it emits toxic fumes of Zr and Cl⁻.

ZTS000 CAS: 20645-04-9 HR: 3
ZIRCONYL ACETATE

mf: C₄H₆O₅•Zr mw: 225.32

PROP: D: 1.46. IDLH 50 mg/m³ (as Zr).

SYNS: BIS(ACETATO-O,O')OXOZIRCONIUM □ DIACETATO-ZIRCONIC ACID

TOXICITY DATA with REFERENCE:

orl-rat LD50:4100 mg/kg AIHOAX 1,637,50
 ipr-rat LD50:300 mg/kg AIHOAX 1,637,50

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

ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen

DFG MAK: 1 mg(Zr)/m³

SAFETY PROFILE: Poison by intraperitoneal route. Moderately toxic by ingestion. When heated to decomposition it emits acrid smoke and irritating fumes. See also ZIRCONIUM COMPOUNDS.

ZTS100 CAS: 24735-35-1 HR: 1
ZIRCONYL SODIUM SULFATE

mf: Na₂O₁₈S₄Zr₂ mw: 644.66

PROP: IDLH 50 mg/m³ (as Zr).

SYNS: OXOBIS(SULFATO(2-)-O)-ZIRCONATE(2-), DISODIUM (9CI) □ SODIUM ZIRCONIUM OXIDE SULFATE □ SODIUM ZIRCONYL SULPHATE □ ZIRCONATE(2-), OXODISULFATO-, DISODIUM (8CI)

TOXICITY DATA with REFERENCE:

orl-rat LD50:10 g/kg EQSFAP 1,1,75

ipr-rat LD50:4100 mg/kg AIHOAX 1,637,50

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

ACGIH TLV: TWA 5 mg(Zr)/m³; STEL 10 mg(Zr)/m³;
 Not Classifiable as a Human Carcinogen

SAFETY PROFILE: Mildly toxic by intraperitoneal route. When heated to decomposition it emits toxic fumes of SO_x and Zr.

ZTS200 CAS: 55634-91-8 HR: 2
ZIZALON

SYNS: ALLOXYDIM □ BAS 90210H □ CARBODIMEDON □ CYCLOHEXANECARBOXYLIC ACID,2,2-DIMETHYL-4,6-DIOXO-5-(1-((2-PROPENYLOXY)AMINO)BUTYLIDENE)-, METHYL ESTER

TOXICITY DATA with REFERENCE:

orl-rat LD50:2260 mg/kg PEMNDP 9,21,1991

ihl-rat LC50:>4300 mg/m³/4H PEMNDP 9,21,1991

skn-rat LD50:>5 g/kg PEMNDP 9,21,1991

skn-qal LD50:2970 mg/kg PEMNDP 9,21,1991

SAFETY PROFILE: Moderately toxic by ingestion, inhalation, and skin contact. When heated to decomposition it emits acrid smoke and irritating vapors.

ZTS300 CAS: 84886-38-4 HR: D
ZOAPATANOLIDE A

mf: C₂₀H₂₆O₆ mw: 362.46

SYN: 2-BUTENOIC ACID, 2-METHYL-, 2,3,3A,4,5,8,9,11A-OCTA-HYDRO-5,9-DIHYDROXY-6,10-DIMETHYL-3-METHYLENE-2-OXOCYCLODECA(B)FURAN-4-YL ESTER, (3as-(3AR*,4S*(Z),-5S*,6E,9S*,10Z,11AS*))-

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

ZTS600 HR: D
ZOAPATLE, crude leaf extract

SYN: MONTANOA TOMENTOSA, leaf extract, crude

SAFETY PROFILE: An experimental teratogen. Experimental reproductive effects.

ZTS625 HR: D
ZOAPATLE, semi-purified leaf extract

SYN: MONTANOA TOMENTOSA, leaf extract, semi-purified

SAFETY PROFILE: An experimental teratogen. Experimental reproductive effects.

ZUA000 CAS: 1155-03-9 HR: 3

ZOLAMINE HYDROCHLORIDEmf: $C_{15}H_{21}N_3OS \cdot ClH$ mw: 327.91**PROP:** Odorless crystals; sltly bitter taste. Mp: 167.5–167.8°. Sol in water.**SYNS:** 2-(2-(DIMETHYLAMINO)ETHYL)((p-METHOXYBENZYL)AMINO)THIAZOLE HYDROCHLORIDE □ N,N-DIMETHYL-N'-(p-METHOXYBENZYL)-N'-(2-THIAZOLYL)ETHYLENE-DIAMINE MONOHYDROCHLORIDE**TOXICITY DATA with REFERENCE:**

orl-rat LDLo:570 mg/kg CLDND*

scu-rat LDLo:275 mg/kg CLDND*

scu-mus LDLo:140 mg/kg CLDND*

ivn-mus LD50:40 mg/kg CLDND*

SAFETY PROFILE: Poison by subcutaneous and intravenous routes. Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO_x , SO_x , and HCl.**ZUA200 CAS: 1222-57-7 HR: 2 ZOLIRIDINE**mf: $C_{14}H_{12}N_2O_2S$ mw: 272.34**PROP:** Crystals. Mp: 242–244°.**SYNS:** 2-(4-(METHYLSULFONYL)PHENYL)IMIDAZO(1,2-a)PYRIDINE □ SOLIMIDIN □ ZOLIMIDIN □ ZOLIMIDINE**TOXICITY DATA with REFERENCE:**

orl-rat LD50:3710 mg/kg USXXAM #3318880

ipr-rat LD50:950 mg/kg ARZNAD 33,1655,83

ipr-mus LD50:1468 mg/kg ARZNAD 33,1655,83

SAFETY PROFILE: Moderately toxic by ingestion and intraperitoneal routes. An anti-ulcer agent. When heated to decomposition it emits toxic fumes of SO_x and NO_x .**ZUA300 CAS: 64092-48-4 HR: 3 ZOMEPIRAC SODIUM**mf: $C_{15}H_{13}ClNO_3 \cdot Na \cdot 2H_2O$ mw: 349.77**SYNS:** 5-(4-CHLOROBENZOYL)-1,4-DIMETHYL-1H-PYRROLE-2-ACETIC ACID SODIUM SALT DIHYDRATE □ MCN 2783-21-98 □ SODIUM-5-(4-CHLOROBENZOYL)-1,4-DIMETHYL-1H-PYRROLE-2-ACETATE DIHYDRATE □ SODIUM ZOMEPIRAC □ ZOMAX □ ZOMEPIRAC □ ZOMEPIRAC SODIUM SALT**TOXICITY DATA with REFERENCE:**

orl-man TDLo:1429 µg/kg;PUL ANAEA3 48,233,82

orl-rat LD50:27 mg/kg DRUGAY 23,250,82

orl-mus LD50:63 mg/kg DRUGAY 23,250,82

orl-ham LD50:743 mg/kg DRUGAY 23,250,82

SAFETY PROFILE: Poison by ingestion. Human systemic effects by ingestion: cyanosis. When heated to decomposition it emits toxic fumes of Cl^- , Na_2O , and NO_x .**ZUA450 CAS: 43200-80-2 HR: 3 ZOPICLONE**mf: $C_{17}H_{17}ClH_6O_3$ mw: 388.85**PROP:** Crystals from acetonitrile/diisopropyl ether (1:1). Mp: 178°.**SYNS:** IMOVANCE □ IMOVANE □ 1-PIPERAZINECARBOXYLIC ACID, 4-METHYL-, 6-(5-CHLORO-2-PYRIDINYL)-6,7-DIHYDRO-7-OXO-5H-PYRROLO(3,4-b)PYRAZIN-5-YL ESTER □ 27267 R.P.**TOXICITY DATA with REFERENCE:**

orl-rat LD50:827 mg/kg OYYAA2 26,935,83

ipr-rat LD50:771 mg/kg OYYAA2 26,935,83

scu-rat LD50:540 mg/kg OYYAA2 26,935,83

ivn-rat LD50:280 mg/kg OYYAA2 26,935,83

ims-rat LD50:295 mg/kg OYYAA2 26,935,83

orl-mus LD50:2174 mg/kg OYYAA2 26,935,83

ipr-mus LD50:1325 mg/kg OYYAA2 26,935,83

scu-mus LD50:888 mg/kg OYYAA2 26,935,83

ivn-mus LD50:321 mg/kg OYYAA2 26,935,83

ims-mus LD50:541 mg/kg OYYAA2 26,935,83

SAFETY PROFILE: Poison by intramuscular and intravenous routes. Moderately toxic by ingestion, intraperitoneal and subcutaneous routes. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of Cl^- .**ZUJ000 CAS: 26615-21-4 HR: 3 ZOTEPINE**mf: $C_{18}H_{18}ClNOS$ mw: 331.88**PROP:** Crystals from cyclohexane. Mp: 90°.**SYNS:** 2-CHLOR-11-(2-DIMETHYLAMINOETHOXY)-DIBENZO(b,f)-THIEPIN (GERMAN) □ 2-((8-CHLORODIBENZO(b,f)-THIEPIN)-10-YL)OXY-N,N-DIMETHYLETHANAMINE □ 2-CHLORO-11-(2-(DIMETHYLAMINO)ETHOXY)DIBENZO(b,f)-THIEPIN □ 2-CHLORO-11-(2-DIMETHYLAMINOETHOXY)-DIBENZO(b,f)THIEPINE □ LODOPIN**TOXICITY DATA with REFERENCE:**

orl-rat LD50:306 mg/kg ARZNAD 29,1600,79

ipr-rat LD50:97 mg/kg ARZNAD 29,1600,79

scu-rat LD50:1290 mg/kg ARZNAD 29,1600,79

ivn-rat LD50:36,800 µg/kg NIIRDN 6,APP-12,82

orl-mus LD50:108 mg/kg ARZNAD 29,1600,79

ipr-mus LD50:36,200 µg/kg ARZNAD 29,1600,79

scu-mus LD50:84,900 µg/kg ARZNAD 29,1600,79

ivn-mus LD50:43,300 µg/kg ARZNAD 29,1600,79

ivn-dog LD50:26,600 µg/kg ARZNAD 29,1600,79

orl-rbt LD50:250 mg/kg ARZNAD 29,1600,79

ivn-rbt LD50:23,800 µg/kg ARZNAD 29,1600,79

SAFETY PROFILE: Poison by ingestion, intravenous, subcutaneous and intraperitoneal routes. An experimental teratogen. Experimental reproductive effects. When heated to decomposition it emits very toxic fumes of SO_x , Cl^- , and NO_x . Used as a tranquilizer.**ZUJ500 CAS: 156052-68-5 HR: 1 ZOAMIDE TECHNICAL**mf: $C_{14}H_{16}Cl_3NO_2$ mw: 336.65**SYN:** BENZAMIDE, 3,5-DICHLORO-N-(3-CHLORO-1-ETHYL-1-METHYL-2-OXOPROPYL)-4-METHYL-**TOXICITY DATA with REFERENCE:**

orl-rat LD50:5000 mg/kg FEREAC 66,49110,2001

orl-mus LD50:5000 mg/kg FEREAC 66,49110,2001

skn-rat LD50:2000 mg/kg FEREAC 66,49110,2001

ihl-rat LC50:5.3 g/m³ FEREAC 66,49110,2001**SAFETY PROFILE:** Low toxicity by ingestion, inhalation, and skin contact. When heated to decomposition it emits toxic vapors of NO_x and Cl^- .**ZUS000 CAS: 22144-77-0 HR: 3 ZYGOSPORIN A**mf: $C_{30}H_{37}NO_6$ mw: 507.68**PROP:** Needles from Me_2CO /pet ether. Mp: 268–271°.**SYNS:** 3-BENZYL-3,3-α,4,5,6,6-α,9,10,12,15-DECAHYDRO-6,12,15-TRIHYDROXY-4,10,12-TRIMETHYL-5-METHYLENE-1H-

3734 ZVA000 ZYLOFURAMINE

CYCLOUNDEC(d)ISOINDOLE-1,11(2H)-DIONE, 15-ACETATE □
CYTOCHALASIN D

TOXICITY DATA with REFERENCE:

cyt-hmn:hla 1 mg/L ECREAL 91,47,75
cyt-hmn:oth 1 mg/L ECREAL 91,47,75
ipr-rat LD50:900 µg/kg TJADAB 15,27A,77
orl-mus LD50:36 mg/kg JJEMAG 48,105,78
ipr-mus LD50:2 mg/kg TJADAB 15,27A,77
scu-mus LD50:1850 µg/kg JJEMAG 48,105,78

SAFETY PROFILE: Poison by ingestion, subcutaneous, and intraperitoneal routes. An experimental teratogen. Experimental reproductive effects. Human mutation data reported. When heated to decomposition it emits toxic fumes of NO_x.

ZVA000 CAS: 3563-92-6 HR: 3
ZYLOFURAMINE

mf: C₁₄N₂₁NO mw: 219.36

PROP: Bp: 101° @ 0.07 mm.

SYN: d-THREO-α-BENZYL-N-ETHYLTETRAHYDROFURFURYLAMINE

TOXICITY DATA with REFERENCE:

orl-mus LD50:475 mg/kg AIPTAK 146,392,63
scu-mus LD50:155 mg/kg AIPTAK 146,392,63
ivn-mus LD50:32 mg/kg AIPTAK 146,392,63

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

ZVJ000 CAS: 315-30-0 HR: 3
ZYLOPRIM

mf: C₅H₄N₄O mw: 136.13

PROP: Crystals from H₂O. Mp: 383–384°.

SYNS: ADENOCK □ AL-100 □ ALLOPURINOL □ ALLOZYM □ ALLURAL □ ALOSITOL □ ALULINE □ ANOPROLIN □ ANZIEF □ APURIN □ APUROL □ BLEMINOL □ BLOXANTH □ BW 56-158 □ CAPLENAL □ CELLIDRIN □ DABROSIN □ 1,5-DIHYDRO-4H-PYRAZOLO(3,4-d)PYRIMIDIN-4-ONE □ EMBARIN □ EPIDROPAL □ FOLIGAN □ GICHTEX □ HPP □ 4'-HYDROXYPYRAZOLOL(3,4-d)PYRIMIDINE □ 4-HYDROXY-1H-PYRAZOLO(3,4-d)PYRIMIDINE □ 4-HYDROXY-3,4-PYRAZOLOPYRIMIDINE □ 4-HYDROXYPYRAZOLO(3,4-d)PYRIMIDINE □ 4-HYDROXYPYRAZOLYL(3,4-d)PYRIMIDINE □ KETANRIFT □ KETOBUN-A □ LOPURIN □ LYSURON □ MINIPLANOR □ MONARCH □ NEKTROHAN □ NSC-1390 □ 4H-PYRAZOLO(3,4-d)PYRIMIDIN-4-ONE □ REMID □ RIBALL □ SUSPENDOL □ TAKANARUMIN □ URBOL □ URICEMIL □ URITAS □ UROBENYL □ UROSIN □ XANTURAT □ ZYLORIC

TOXICITY DATA with REFERENCE:

orl-wmn TDLo:42 mg/kg/7D-I:KID,SKN AJMEAZ 76,47,84

orl-wmn LDLo:88 mg/kg/22D-I:BLD ARDIAO 40,245,81

orl-man TDLo:21,429 µg/kg/5D-I:CNS,LIV,BLD ARDIAO 40,245,81

ipr-rat LD50:900 mg/kg ADTEAS 3,181,68

ipr-mus LD50:214 mg/kg NYKZAU 64,108,68

scu-mus LD50:298 mg/kg YAKUD5 23,715,81

CONSENSUS REPORTS: Reported in EPA TSCA Inventory.

SAFETY PROFILE: Human poison by ingestion. Poison experimentally by intraperitoneal and subcutaneous routes. An experimental teratogen. Human systemic effects by ingestion: blood leukopenia, dermatitis, jaundice, muscle weakness, thrombocytopenia. When heated to decomposition it emits toxic fumes of NO_x. An FDA proprietary drug used as a xanthine oxidase inhibitor.

ZVJ500 CAS: 132539-06-1 HR: D
ZYPREXA

mf: C₁₇H₂₀N₄S mw: 312.47

SYNS: OLANZAPINE □ LY 170053 □ 2-METHYL-4-(4-METHYL-1-PIPERAZINYL)-10H-THIENO(2,3-B)(1,5)BENZODIAZEPINE □ 10H-THIENO(2,3-B)(1,5)BENZODIAZEPINE, 2-METHYL-4-(4-METHYL-1-PIPERAZINYL)-

TOXICITY DATA with REFERENCE:

orl-man LDLo:7067 µg/kg:PUL,GIT JFSCAS 41,1252,1998

orl-wmn TDLo:400 µg/kg:BAH,BLD AJPSAO 156,1835,1999

orl-wmn TDLo:12 mg/kg:BAH,BPR AEMED3 32,275,1998

orl-wmn TDLo:12 mg/kg/60D-I:NAH AIMEAS 131,72,1999

orl-wmn LDLo:30 mg/kg/22W-I:BAH,BPR APHRER 33,787,1999

orl-hmn TDLo:16560 µg/kg/12W-I:BPR JCLPDE 60,767,1999

orl-man TDLo:2570 µg/kg/12D-I:CNS JCPYDR 19,192,1999

SAFETY PROFILE: Human systemic effects. When heated to decomposition it emits toxic vapors of NO_x and SO_x.

ZVS000 CAS: 102583-71-1 HR: 2
ZZL-0810

TOXICITY DATA with REFERENCE:

skn-rbt 500 mg open MLD UCDS** 2/24/69

orl-rat LD50:2050 mg/kg UCDS** 2/24/69

SAFETY PROFILE: Moderately toxic by ingestion. A skin irritant.