

# Q

## QAK000

CAS: 72-44-6

HR: 3

## QUAALUDE

mf: C<sub>16</sub>H<sub>14</sub>N<sub>2</sub>O mw: 250.32

**PROP:** Crystals. Mp: 120°. Sol in ethanol and chloroform; practically insol in water.

**SYNS:** CATEUDYL □ CITEXAL □ CI-705 □ CN 38703 □ 3,4-DIHYDRO-2-METHYL-4-OXO-3-o-TOLYLQUINAZOLINE □ DORMIGOA □ DORMOGEN □ DORMUTIL □ DORSEDIN □ FADORMIR □ HOLODORM □ HYMINAL □ HYPOL □ HYPTOR BASE □ IPNOFIL □ MAOA □ MEQUIN □ MELSELIN BASE □ MELSOMIN □ METAQUALON □ METHAQUALONE □ METHA-QUALONEINONE □ 2-METHYL-3-(2-METHYLPHENYL)-4-QUINAZOLINONE □ 2-METHYL-3-(2-METHYLPHENYL)-4(3H)-QUINAZOLINONE □ 2-METHYL-3-o-TOLYL-4(3H)-CHINAZOLIN-ON (GERMAN) □ 2-METHYL-3-o-TOLYL-4(3H)-CHINAZOLONE □ 2-METHYL-3-(o-TOLYL)-3,4-DIHYDRO-4-(QUINAZOLINONE) □ 2-METHYL-3-(o-TOLYL)-3,4-DIHYDRO-4-QUINAZOLINONE □ 2-METHYL-3-TOLYL-4-OXYBENZDIAZINE □ 2-METHYL-3-o-TOLYL-4(3H)-QUINAZOLINONE □ 2-METHYL-3-o-TOLYL-4-QUINAZOLONE □ 2-METHYL-3-(2-TOLYL)QUINAZOL-4-ONE □ METOLQUIZOL-ONE □ MOLLINOX □ MOTOLON □ MOZAMB-IN □ MTQ □ NOBED-ORM □ NOCTILENE □ NORMI-NOX □ OMNYL □ OPTINOXAN □ ORTHONAL □ ORTONAL □ PAREST □ PARMINAL □ PRO-DORM □ QZ 2 □ REVONAL □ RORER 148 □ ROUQUALONE □ SINDESVEL □ SOMBEROL □ SOMNAPAC □ SOMNOMED □ SONAL □ SOVERIN □ TORINAL □ TUAZOLE □ TUAZOLONE

## TOXICITY DATA with REFERENCE:

orl-rat TDLo:11 g/kg (3D male/3D pre-22D preg):REP EXPEAM 19,183,63

orl-rbt TDLo:900 mg/kg (female 8-16D post):TER TXAPA9 10,244,67

orl-hmn TDLo:57 mg/kg:CNS,PUL,GIT ATXKA8 20,31,63

orl-man LDLo:114 mg/kg ATXKA8 20,31,63

orl-rat LD50:185 mg/kg JMCMA 24,490,81

ipr-rat LD50:125 mg/kg ARZNAD 17,242,67

orl-mus LD50:420 mg/kg TXAPA9 1,42,59

ipr-mus LD50:180 mg/kg IJMRAQ 69,1008,79

par-mus LD50:500 mg/kg PCJOAU 7,626,73

ivn-rbt LD50:100 mg/kg ATXKA8 20,31,63

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Human poison by ingestion. Experimental poison by ingestion, intravenous, and intraperitoneal routes. Moderately toxic by parenteral route. Human systemic effects by ingestion: convulsions or effect on seizure threshold, nausea or vomiting, and pulmonary changes. An experimental teratogen. Experimental reproductive effects. An often abused controlled drug under 21CFR 1308.11. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

## QAT000

CAS: 102-60-3

HR: 2

## QUADROL

mf: C<sub>14</sub>H<sub>32</sub>N<sub>2</sub>O<sub>4</sub> mw: 292.48

**PROP:** A viscous liquid or solid. Mp: 31–32°, bp: 190°. Misc with water; sol in ethanol, methanol, toluene, ethylene glycol, and perchloroethylene.

**SYNS:** ENTPROL □ 1,1',1'',1'''-(ETHYLENEDINITRIOLO)TETRA-2-PROPANOL □ N,N,N',N'-TETRAKIS(2-HYDROXY-PROPYL)-ETHYLENEDIAMINE

## TOXICITY DATA with REFERENCE:

unr-mam LD50:3900 mg/kg FMCHA2 -,D261,80

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Moderately toxic by an unspecified route. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

## QAT510

CAS: 64365-16-8

HR: 2

## QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C<sub>10-18</sub>-ALKYLDIMETHYL, CHLORIDES

**SYNS:** KATAMIN AB □ KATAMINE AB □ VARIQUAT 60LC

## TOXICITY DATA with REFERENCE:

orl-rat LD50:760 mg/kg GISAAA 55(6),27,90

orl-mus LD50:520 mg/kg GISAAA 55(6),27,90

**SAFETY PROFILE:** Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NO<sub>x</sub> and Cl<sup>-</sup>.

## QAT520

CAS: 68424-85-1

HR: 2

## QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C<sub>12-C16</sub>-ALKYLDIMETHYL, CHLORIDES

**SYNS:** AMMONIUM, ALKYL(C<sub>12-C16</sub>)DIMETHYLBENZYL-, CHLORIDES □ BARQUAT MB 80 □ BENZYL-C<sub>12-C16</sub>-ALKYLDIMETHYL AMMONIUM CHLORIDES □ BIOQUAT 80 □ BIOQUAT 501 □ BLACK ALG AETRINE □ BTC 835 □ CATIGENE T80 □ CYNICAL 80 □ GARDIQUAT 1250AF □ HYAMINE 3500 □ MAQUAT MC 1412 □ PROTEK Q □ ROLQUAT CDM/BC □ TRET-O-LITE WF 88 □ TRET-O-LITE WF 828

## TOXICITY DATA with REFERENCE:

orl-rat LD50:447 mg/kg FMCHA2 -,C167,91

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Moderately toxic by ingestion. When heated to decomposition it emits toxic vapors of NH<sub>4</sub><sup>+</sup> and Cl<sup>-</sup>.

**QAT550 CAS: 61789-80-8 HR: 1**  
**QUATERNARY AMMONIUM COMPOUNDS,**  
**BIS(HYDROGENATED TALLOW**  
**ALKYL)DIMETHYL CHLORIDES**

**SYNS:** ADOGEN 442 □ ADOGEN 448 □ ADOGEN 442-100 P □ ALIQUAT 264 □ AMMONYX 2200 □ ARQUAD 2HT □ ARQUAD 2HT75 □ DITALLOW DIMETHYL AMMONIUM CHLORIDE □ KEMAMINE Q 9702C □ KEMAMINE QSML2 □ NORAMIUM M 2SH □ NORAMIUM M 2SH15 □ PRAPAGEN WK □ PRAPAGEN WKT □ QUATERNIUM-18

**TOXICITY DATA with REFERENCE:**

skn-rbt 50 mg/21D MLD JACTDZ 1(2),71,82  
 eye-rbt 100 mg JACTDZ 1,709,92  
 orl-rat LD50:>9850 mg/kg JACTDZ 1,708,92

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Low toxicity by ingestion. A skin and eye irritant. When heated to decomposition it emits toxic vapors of  $\text{NH}_4^+$  and  $\text{Cl}^-$ .

**QAT565 CAS: 63393-96-4 HR: 2**  
**QUATERNARY AMMONIUM COMPOUNDS, TRI-**  
**( $\text{C}_8\text{-}_{10}$ )-ALKYLMETHYL-, CHLORIDES**

**SYNS:** ADOGEN 464 □ ALIQUAT 336 □ ALIQUAT 7402 □ ALIQUAT N 263 □ ALIQUAT 336S □ DISPERSTAT A □ DISPERSTAT W

**TOXICITY DATA with REFERENCE:**

ihl-rat LCLo:2400 mg/m<sup>3</sup>/12H HYDRDA 3,201,78

**SAFETY PROFILE:** Moderately toxic by inhalation. When heated to decomposition it emits toxic vapors of  $\text{NO}_x$  and  $\text{Cl}^-$ .

**QAT600 CAS: 81859-24-7 HR: 1**  
**QUATERNIUM 19**

**PROP:** White to light yellow powder, slight specific odor.

**SYNS:** CELLULOSE, 2-HYDROXYETHYL 2-(2-HYDROXY-3-(TRIMETHYLAMMONIO)PROPOXY)ETHYL 2-HYDROXY-3-(TRIMETHYLAMMONIO)PROPYL ETHER, CHLORIDE □ JR □ JR 1 □ JR 125 □ JR 400 □ JR 30M □ LEOGARD G □ LEOGUARD G □ LR 400 □ LR 300M □ POLYMER JR □ POLYMER JR 1 □ POLYMER JR 125 □ POLYMER JR 400 □ POLYMER JR 30M □ POLYMER LR □ POLYQUATERNIUM 10 □ UCARE JR 125 □ UCARE JR 400 □ UCARE JR 30M □ UCARE LR 400 □ UCARE LR 300M □ UCARE POLYMER JR □ UCARE POLYMER LR

**TOXICITY DATA with REFERENCE:**

orl-rat LD50:13,100 mg/kg JACTDZ 7(3),335,88

**SAFETY PROFILE:** Low toxicity by ingestion. When heated to decomposition it emits toxic vapors of  $\text{NO}_x$ .

**QBJ000 CAS: 1401-55-4 HR: 3**  
**QUEBRACHO TANNIN**

**PROP:** Yellow brown powder, faint odor. Weak acid in water. Mp: Decomposes.

**SYNS:** SCHINOPSIS LORENTZII TANNIN □ TANNIN from QUEBRACHO

**TOXICITY DATA with REFERENCE:**

scu-rat TDLo:350 mg/kg/12W-I:ETA BJCAAI 14,147,60  
 ipr-mus LD50:360 mg/kg JPPMAB 9,98,57  
 ivn-mus LD50:130 mg/kg JPPMAB 9,98,57

**SAFETY PROFILE:** Poison by intraperitoneal and intravenous routes. Questionable carcinogen with experimental tumorigenic data. When heated to

decomposition it emits acrid smoke and irritating fumes. See also TANNIN.

**QBS000 CAS: 64719-39-7 HR: 3**  
**QUELAMYCIN**

mf:  $\text{C}_{27}\text{H}_{27}\text{O}_{11} \cdot 2\text{Fe}(2^+) \cdot \text{Fe}(3^+)$  mw: 709.07

**SYNS:** NSC-267703 □ TRIFERRIC ADRIAMYCIN □ TRIFERRIC DOXORUBICIN

**TOXICITY DATA with REFERENCE:**

dni-mus:leu 15  $\mu\text{mol/L}$  EJCAAH 14,1185,78  
 ivn-hmn TDLo:60 mg/kg:BLD CTRRDO 62,1527,78  
 ipr-rat LD50:45 mg/kg DRFUD4 4,356,79  
 ivn-rat LD50:45 mg/kg DRFUD4 4,356,79  
 ipr-mus LD50:45 mg/kg EJCAAH 14,1185,78  
 ivn-mus LD50:45 mg/kg DRFUD4 4,356,79

**SAFETY PROFILE:** Poison by intravenous and intraperitoneal routes. Human systemic effects by intravenous route: blood effects. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes. See also IRON DUST.

**QCA000 CAS: 117-39-5 HR: 3**  
**QUERCETIN**

mf:  $\text{C}_{15}\text{H}_{10}\text{O}_7$  mw: 302.25

**PROP:** Yellow crystals. Mp: 313–314° (decomp).

**SYNS:** C.I. 75670 □ C.I. NATURAL RED 1 □ C.I. NATURAL YELLOW 10 □ CYANIDELONON 1522 □ 2-(3,4-DIHYDROXY-PHENYL)-3,5,7-TRIHYDROXY-4H-1-BENZOPYRAN-4-ONE □ MELETIN □ NCI-C60106 □ 3,5,7,3',4'-PENTAHYDROXY-FLAVONE □ QUERCETINE □ QUERCETOL □ QUERCITIN □ QUERTINE □ SOPHORETIN □ 3',4',5,7-TETRAHYDROXY-FLAVAN-3-OL □ T-GELB BZW, GRUN 1 □ XANTHAURINE

**TOXICITY DATA with REFERENCE:**

dni-hmn:fbr 50 mg/L BCPCA6 33,3823,84  
 sce-ham:ovr 15 mg/L MUREAV 113,45,83  
 orl-rat TDLo:33,610 mg/kg/58W-C:CAR CNREA8 40,3468,80  
 orl-rat TD:38,235 mg/kg/58W-C:CAR CNREA8 40,3468,80  
 orl-rat TD:243 g/kg/3Y-C:NEO PAACA3 25,95,84  
 orl-rat LD50:161 mg/kg PSEBAA 77,269,51  
 orl-mus LD50:159 mg/kg PSEBAA 77,269,51  
 scu-mus LD50:97 mg/kg PSEBAA 77,269,51  
 ivn-mus LD50:18 mg/kg CSLNX\* NX#02589

**CONSENSUS REPORTS:** IARC Cancer Review: Group 3 IMEMDT 7,56,87; Animal Limited Evidence IMEMDT 31,213,83. NTP Carcinogenesis Studies (feed); Some Evidence: rat NTPTR\* NTP-TR-409,92. Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

**SAFETY PROFILE:** Poison by ingestion, subcutaneous, and intravenous routes. Experimental teratogenic and reproductive effects. Questionable carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Human mutation data reported. Used as a pharmaceutical and veterinary drug. When heated to decomposition it emits acrid smoke and irritating fumes.

**QCA175 CAS: 6151-25-3 HR: 3**  
**QUERCETIN DIHYDRATE**

mf:  $\text{C}_{15}\text{H}_{10}\text{O}_7 \cdot 2\text{H}_2\text{O}$  mw: 338.29

**PROP:** Mp: >300°**SYN:** 3,3',4',5,7-PENTAHYDROXYFLAVONE**TOXICITY DATA with REFERENCE:**

mmo-sat 15 µg/plate MUREAV 206,201,88

mma-sat 7500 ng/plate MUREAV 206,201,88

orl-rat TDLo:1350 g/kg/77W-C:ETA,REP CALEDQ 13,15,81

orl-rat TD:4250 g/kg/121W-C:ETA,REP CALEDQ 13,15,81

orl-mus LD50:159 mg/kg PSEBAA 77,269,51

**SAFETY PROFILE:** Poison by ingestion.

Experimental reproductive effects. Questionable carcinogen with experimental tumorigenic data. Mutation data reported. When heated to decomposition it emits acrid smoke and irritating fumes. See also QUERCETIN.

**QCJ000****CAS: 522-12-3****HR: 3****QUERCITRIN**mf: C<sub>21</sub>H<sub>20</sub>O<sub>11</sub> mw: 448.41**PROP:** Yellow crystals from dil methanol or ethanol.

Mp: 182–185°. Crystals from water, mp: 167°. Insol in cold water, ether; sol in alc and in aqueous alkaline solns; sltly sol in hot water.

**SYNS:** C.I. 75720 □ NCI-C60102 □ 3,3',4',5,7-PENTAHYDROXYFLAVONE-3-I-RHAMNOSIDE □ QUERCETIN, 3-(6-DEOXY-α-I-MANNOPYRANOSIDE) □ QUERCETIN-3-I-RHAMNOSIDE □ USAF CF-2**TOXICITY DATA with REFERENCE:**

mma-sat 166 nmol/plate MUREAV 54,297,78

ipr-mus LD50:200 mg/kg NTIS\*\* AD277-689

**SAFETY PROFILE:** Poison by intraperitoneal route.

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

**QCJ275****CAS: 1916-59-2****HR: 3****QUESTIONMYCIN A**mf: C<sub>12</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub> mw: 212.22**PROP:** Dark-brown or red crystals from EtOH. Sol in EtOH.**SYNS:** 2-AMINO-3H-PHENOXAZIN-3-ONE □ 2-AMINOPHENOXAZON □ 2-AMINOPHENOXAZONE**TOXICITY DATA with REFERENCE:**

dni-mus:ast 20 µmol/L CPBTAL 17,105,69

dnd-mam lym 100 µmol/L CPBTAL 17,105,69

ipr-mus LD50:200 mg/kg 85GDA2 5,174,81

**SAFETY PROFILE:** Poison by intraperitoneal route.Mutation data reported. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.**QCJ300****CAS: 111974-72-2****HR: D****QUETIAPINE FUMARATE**mf: C<sub>42</sub>H<sub>50</sub>N<sub>6</sub>O<sub>4</sub>S<sub>2</sub>•C<sub>4</sub>H<sub>4</sub>O<sub>4</sub> mw: 883.10**SYNS:** ETHANOL, 2-(2-(4-DIBENZO(B,F)(1,4)THIAZEPIN-11-YL-1-PIPERAZINYL)ETHOXY)-, (E)-2-BUTENEDIOATE (2:1) SALT □ ICI 204636 □ SEROQUEL**TOXICITY DATA with REFERENCE:**

orl-wmn TDLo:31 mg/kg:BAH,CVS CLPTAT 68,92,2000

**SAFETY PROFILE:** Human systemic effects. When heated to decomposition it emits toxic vapors of NO<sub>x</sub> and SO<sub>x</sub>.**QCS000****CAS: 545-93-7****HR: 3****QUIETALUM**mf: C<sub>10</sub>H<sub>13</sub>BrN<sub>2</sub>O<sub>3</sub> mw: 289.16**PROP:** Crystals; sltly bitter taste. Mp: 177–179°. Sltly sol in water; freely sol in alc, glacial acetic acid, acetone, and alkalies; sparingly sol in ether, chloroform, and benzene.**SYNS:** 5-(2'-BROMALLYL)-5-ISOPROPYLBARBITURIC ACID □ BROMOAPROBARBITAL □ 5-(2-BROMO-2-PROPENYL)-5-(1-METHYLETHYL)-2,4,6(1H,3H,5H)-PYRIMIDINETRIONE □ IBOMAL □ 5-ISOPROPYL-5-BROMALLYLBARBITURIC ACID □ 5-ISOPROPYL-5-(2-BROMOALLYL)BARBITUATE □ KWIETAL □ NOCTAL □ NOCTENAL □ NOSTAL □ NOSTRAL □ PROPALDON □ PROPALLYLONAL □ QUIETAL**TOXICITY DATA with REFERENCE:**

ipr-rbt LDLo:60 mg/kg JPETAB 44,325,32

scu-rat LD50:90 mg/kg AEPPAE 152,341,30

scu-mus LDLo:100 mg/kg HBAMAK 4,1289,35

orl-rbt LDLo:225 mg/kg JPETAB 44,325,32

ipr-rbt LDLo:120 mg/kg JPETAB 44,325,32

scu-gpg LDLo:80 mg/kg HBAMAK 4,1289,35

scu-frg LDLo:300 mg/kg HBAMAK 4,1289,35

orl-mam LDLo:300 mg/kg JPETAB 42,253,31

**SAFETY PROFILE:** Poison by ingestion, intraperitoneal, and subcutaneous routes. Used as a sedative and hypnotic agent. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub> and Br<sup>-</sup>. A controlled drug under 21 CFR 1308.11, which may be habit forming. See also BARBITURATES.**QCS875****CAS: 10072-24-9****HR: 2****QUINACRINE ETHYL M/2**mf: C<sub>18</sub>H<sub>19</sub>Cl<sub>2</sub>N<sub>3</sub>O•2ClH•H<sub>2</sub>O mw: 455.24**SYNS:** ACRIDINE, 9-(2-(2-CHLOROETHYL)AMINO)ETHYLAMINO)-6-CHLORO-2-METHOXY-, DIHYDROCHLORIDE, HYDRATE □ 9-(2-(2-CHLOROETHYL)AMINO)ETHYLAMINO)-6-CHLORO-2-METHOXYACRIDINE, DIHYDROCHLORIDE □ ICR-125**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic fumes of NO<sub>x</sub> and HCl.**QCS900****CAS: 316-05-2****HR: D****QUINACRINE METHANESULFONATE**mf: C<sub>23</sub>H<sub>30</sub>ClN<sub>3</sub>O•2CH<sub>4</sub>O<sub>3</sub>S mw: 592.23**SYNS:** ACRIDINE, 6-CHLORO-9-((4-(DIETHYLAMINO)-1-METHYLBUTYL)AMINO)-2-METHOXY-, DIMETHANE-SULFONATE □ MEPACRINE DIMETHANESULFONATE SALT □ MEPACRINE METHANESULFONATE □ MUSONAL □ 1,4-PENTANEDIAMINE, N4-(6-CHLORO-2-METHOXY-9-ACRIDINYL)-N1,N1-DIETHYL-, DIMETHANESULFONATE □ QUINACRINE, DIMETHANESULFONATE**TOXICITY DATA with REFERENCE:**

add-unr-lym 510 nmol/L JMCMA 21,658,1978

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>, SO<sub>x</sub>, and Cl<sup>-</sup>.**QDJ000****CAS: 64046-79-3****HR: 3****QUINACRINE MUSTARD**mf: C<sub>23</sub>H<sub>28</sub>Cl<sub>3</sub>N<sub>3</sub>O mw: 468.89**SYNS:** 9-(4-(BIS-β-CHLOROETHYLAMINO)-1-METHYLBUTYLAMINO)-6-CHLORO-2-METHOXYACRIDINE □ NSC-3424

**TOXICITY DATA with REFERENCE:**

cyt-hmn-lym 1 µg/L/72 H ARTODN 46,61,80  
 msc-ham-lng 1 mg/L CNREA8 44,3270,84  
 ipr-rat LD10:970 µg/kg CNCRA6 17,1,62  
 ivn-dog LDLo:910 µg/kg CCSUBJ 2,202,65  
 ivn-mus LDLo:910 µg/kg CCSUBJ 2,202,65

**SAFETY PROFILE:** A deadly poison by intravenous and intraperitoneal routes. Human mutagenic data reported. When heated to decomposition it emits very toxic fumes of Cl<sup>-</sup> and NO<sub>x</sub>.

**QDS000 CAS: 4213-45-0 HR: 2**  
**QUINACRINE MUSTARD DIHYDROCHLORIDE**

mf: C<sub>23</sub>H<sub>28</sub>Cl<sub>3</sub>N<sub>3</sub>O•2ClH mw: 541.81

**SYNS:** 9-(4-BIS(2-CHLOROETHYL)AMINO-1-METHYLBUTYL-AMINO)-6-CHLORO-2-METHOXYACRIDINE DIHYDRO-CHLORIDE □ ICR 10 □ 2-METHOXY-6-CHLORO-9-(4-BIS(2-CHLOROETHYL)AMINO-1-METHYLBUTYLAMINO)ACRIDINE DIHYDROCHLORIDE □ 2-METHOXY-6-CHLORO-9-(3-(ETHYL-2-CHLOROETHYL)AMINOPROPYLAMINO)ACRIDINE DIHYDROCHLORIDE □ QUINACRINE MUSTARD

**TOXICITY DATA with REFERENCE:**

dnr-esc 20 µL/disc MUREAV 97,1,82  
 dnr-bcs 20 µL/disc MUREAV 97,1,82  
 cyt-mam:lng 50 mg/L HEREAY 69,217,71  
 sce-hmn-lym 1 mg/L MUREAV 30,273,75

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

**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. Human mutation data reported. Corrosive. When heated to decomposition it emits very toxic fumes of Cl<sup>-</sup> and NO<sub>x</sub>. See also QUINACRINE MUSTARD.

**QDS225 CAS: 7054-25-3 HR: 3**  
**QUINAGLUTE**

mf: C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>•C<sub>6</sub>H<sub>12</sub>O<sub>7</sub> mw: 520.64

**PROP:** Triboluminescent. Mp: 174–175° after drying of solvated crystals.

**SYNS:** QUINIDINE GLUCONATE □ QUINIDINE-d-GLUCONATE (salt) □ QUINIDINE MONO-d-GLUCONATE (salt)

**TOXICITY DATA with REFERENCE:**

orl-man TDLo:7609 mg/kg/78W-I:SKN AIMDAP 145,446,85  
 orl-wmn TDLo:1773 mg/kg/13W-I:SKN AIMDAP 145,446,85  
 ipr-mus LDLo:150 mg/kg TXAPA9 23,288,72

**SAFETY PROFILE:** Poison by intraperitoneal route. Human systemic effects by ingestion: allergic dermatitis. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>. See also QUINIDINE.

**QEA000 CAS: 93-10-7 HR: 3**  
**QUINALDIC ACID**

mf: C<sub>10</sub>H<sub>7</sub>NO<sub>2</sub> mw: 173.18

**PROP:** Dihydrate: crystals or needles. Mp: 155–157°. Sol in hot H<sub>2</sub>O and C<sub>6</sub>H<sub>6</sub>; mod sol in cold H<sub>2</sub>O.

**SYNS:** QUINALDINIC ACID □ QUINOLINE-2-CARBOXYLIC ACID □ 2-QUINOLINECARBOXYLIC ACID

**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:1 g/kg FATOAO 41,708,78  
 orl-bwd LD50:100 mg/kg TXAPA9 21,315,72

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by ingestion. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QEJ000 CAS: 91-63-4 HR: 2**  
**QUINALDINE**

mf: C<sub>10</sub>H<sub>9</sub>N mw: 143.20

**PROP:** Colorless, oily liquid; quinoline odor. Turns reddish brown in air. D: 1.06, mp: -2°, bp: 246–247°. Insol in water; sol in chloroform and ether.

**SYNS:** CHINALDINE □ 2-METHYLQUINOLINE

**TOXICITY DATA with REFERENCE:**

skn-rbt 10 mg/24H MLD AMIHBC 4,119,51  
 eye-rbt 750 µg SEV AMIHBC 4,119,51  
 orl-rat LD50:1230 mg/kg AMIHBC 4,119,51  
 skn-rbt LD50:1870 mg/kg AMIHBC 4,119,51

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Moderately toxic by ingestion and skin contact. A skin and severe eye irritant. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QEJ800 CAS: 86-96-4 HR: 2**  
**2,4(1H,3H)-QUINAZOLINEDIONE**

mf: C<sub>8</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub> mw: 162.16

**PROP:** Prisms from DMF/CHCl<sub>3</sub>. Mp: 358°.

**SYNS:** BENZOURACIL □ BENZOYLENEUREA □ 2,4-DIHYDROXYQUINAZOLINE □ 2,4-DIOXOTETRAHYDROQUINAZOLINE □ 2-KETO-4-QUINAZOLINONE □ QUINAZOLINEDIONE □ QUINAZOLINE-2,4-DIONE □ 2,4-QUINAZOLINEDIONE □ (1H,3H)QUINAZOLINE DIONE-2,4

**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:1200 mg/kg CHTPBA 3,100,68  
 ipr-mus LD50:1447 mg/kg ARZNAD 12,1204,62

**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QFA000 CAS: 491-36-1 HR: 2**  
**4(3H)-QUINAZOLINONE**

mf: C<sub>8</sub>H<sub>6</sub>N<sub>2</sub>O mw: 146.16

**PROP:** White to grey solid. Sol in methanol.

**SYN:** 4-QUINAZOLINONE

**TOXICITY DATA with REFERENCE:**

orl-mus LD50:609 mg/kg ARZNAD 12,1204,62  
 ipr-mus LD50:450 mg/kg ARZNAD 12,1204,62

**SAFETY PROFILE:** Moderately toxic by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QFA250 CAS: 152-43-2 HR: 2**  
**QUINESTROL**

mf: C<sub>25</sub>H<sub>32</sub>O<sub>2</sub> mw: 364.57

**PROP:** Crystals. Mp: 107–108°.

**SYNS:** 3-(CYCLOPENTYLOXY)-19-NOR-17-α-PREGNA-1,3,5(10)-TRIEN-20-YN-17-OL □ EECPE □ ESTON □ ESTRADIOL-17-β 3-CYCLOPENTYL ETHER □ ESTROVIS □ ESTROVIS 4000 □ ESTROVISTER □ 17-α-ETHINYLESTRADIOL 3-CYCLOPENTYL ETHER □ PLESTROVIS □ QUI-LEA □ W 3566

**SAFETY PROFILE:** Human female reproductive effects by ingestion of extremely small amounts: postpartum disorders and changes in fertility. Experimental reproductive effects. A steroid. When heated to decomposition it emits acrid smoke and irritating fumes.

**QFA275 CAS: 3000-39-3 HR: 2**  
**QUINGESTANOL ACETATE**

mf:  $C_{27}H_{36}O_3$  mw: 408.63

**PROP:** A solid. Mp: 182–184°.

**SYNS:** 3-CYCLOPENTYL ENOL ETHER of NORETHINDRONE ACETATE □ 3-(CYCLOPENTYLOXY)-19-NOR-17- $\alpha$ -PREGNA-3,5-DIEN-20-YN-17-OL ACETATE (ester) □ NORETHINDRONE ACETATE 3-CYCLOPENTYL ENOL ETHER

**SAFETY PROFILE:** Human female reproductive effects by ingestion of very small amounts: changes in menstrual cycle, ovaries, fallopian tubes, and fertility index. When heated to decomposition it emits acrid smoke and irritating fumes.

**QFJ000 CAS: 106-34-3 HR: 3**  
**QUINHYDRONE**

mf:  $C_6H_6O_2 \cdot C_6H_6O_2$  mw: 220.24

**PROP:** Dark green crystals or red-brown needles. D: 1.40, mp: 171°. Sltly sol in cold water; sol in alc, ether, hot water, ammonia; insol in pet ether. Subl with partial decomp.

**SYNS:** p-BENZOQUINONE, compounded with HYDROQUINONE □ GREEN HYDROQUINONE □ HYDROQUINONE, compounded with p-BENZOQUINONE

**TOXICITY DATA with REFERENCE:**

orl-rat LDLo:225 mg/kg FEPA7 8,348,49

ivn-rat LD50:35 mg/kg FEPA7 8,348,49

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by ingestion and intravenous routes. Small doses caused lowered metabolism. When heated to decomposition it emits acrid smoke and irritating fumes.

**QFJ300 HR: 3**  
**QUINICINE OXALATE**

mf:  $C_{20}H_{24}N_2O_2 \cdot C_2H_2O_4$  mw: 414.50

**SYN:** 1-(6-METHOXY-4-QUINOLYL)-3-(3-VINYL-4-PIPERIDYL)-1-PROPANONE OXALATE

**TOXICITY DATA with REFERENCE:**

orl-mus LD50:420 mg/kg APFRAD 24,39,66

scu-mus LD50:155 mg/kg APFRAD 24,39,66

ivn-mus LD50:48 mg/kg APFRAD 24,39,66

orl-gpg LDLo:700 mg/kg APFRAD 24,39,66

scu-gpg LDLo:250 mg/kg APFRAD 24,39,66

ivn-gpg LDLo:60 mg/kg APFRAD 24,39,66

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

**QFS000 CAS: 56-54-2 HR: 3**  
**QUINIDINE**

mf:  $C_{20}H_{24}N_2O_2$  mw: 324.46

**PROP:** A solid. Mp: 174–175° (anhyd).

**SYNS:** CHINIDIN (GERMAN) □ CIN-QUIN □ CONCHININ □ CONQUININE □ 6'-METHOXYCINCHONAN-9-OL □  $\alpha$ -(6-METHOXY-4-QUINOLYL)-5-VINY-2-QUINUCLIDINE-METHANOL □ 6-METHOXY- $\alpha$ -(5-VINY-2-QUINUCLIDINYL)-4-QUINOLINEMETHANOL □ NCI-C56246 □ PITAYINE □ QUINICARDINE □ QUINIDEX □ (+)-QUINIDINE □  $\beta$ -QUININE

**TOXICITY DATA with REFERENCE:**

skn-rbt 3% MLD AIPTAK 137,410,62

orl-rat LD50:263 mg/kg ARZNAD 27,589,77

ivn-rat LD50:23 mg/kg JPETAB 128,22,60

orl-mus LD50:535 mg/kg JPETAB 105,291,52

ipr-mus LD50:135 mg/kg AIPTAK 137,410,62

scu-mus LDLo:400 mg/kg AEPPAE 205,129,48

ivn-mus LD50:53,600  $\mu$ g/kg JMCMA 27,1142,84

ims-mus LD50:200 mg/kg 27ZIAQ -,232,73

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by ingestion, subcutaneous, intravenous, intramuscular, and intraperitoneal routes. A skin irritant. Implicated in aplastic anemia. When heated to decomposition it emits toxic fumes of  $NO_x$ .

**QFS100 CAS: 747-45-5 HR: 1**  
**QUINIDINE SULFATE (1:1) (salt)**

mf:  $C_{20}H_{24}N_2O_2 \cdot H_2O_4S$  mw: 422.54

**SYNS:** BIQUIN DURULES □ CHINIDIN DURULES □ CHINIDIN VUFB □ CINCHONAN-9-OL, 6'-METHOXY-, (9S)-, SULFATE (1:1) (SALT) (9CI) □ (9S)-6'-METHOXYCINCHONAN-9-OL SULFATE (1:1) (SALT) □ KINIDIN DURETTER □ KINIDIN DURULES □ KINILENTIN □ OPTOCHINIDIN □ QUINIDINE BISULFATE

**TOXICITY DATA with REFERENCE:**

orl-man TDLo:225 mg/kg/3W-I AIMDAP 145,2051,85

orl-wmn TDLo:210 mg/kg/3W-I AIMEAS 108,369,88

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Human systemic effects by ingestion: vascular changes, joint changes. When heated to decomposition it emits toxic vapors of  $NO_x$  and  $SO_x$ .

**QHA000 CAS: 50-54-4 HR: 3**  
**QUINIDINE SULFATE (2:1) (salt)**

mf:  $C_{40}H_{48}N_4O_4 \cdot H_2O_4S$  mw: 747.00

**SYNS:** CHINIDINE SULFATE □ CINCHONAN-9-OL, 6'-METHOXY-, (9S)-, SULFATE (2:1) (SALT) (9CI) □ CIN-QUIN □ (9S)-6'-METHOXYCINCHONAN-9-OL SULFATE (2:1) (SALT) □ QUINICARDINE □ QUINIDATE □ QUINIDEX □ QUINIDINE MONOSULFATE □ QUINIDINE SULFATE □ QUINIDINE SULPHATE □ QUINITEX □ QUINORA □ SYSTODIN

**TOXICITY DATA with REFERENCE:**

orl-man TDLo:240 mg/kg/2W-I:EYE JTCTDW 20,367,83

orl-wmn TDLo:272 mg/kg/17D-I:CVS AIMDAP 145,2051,85

orl-man TDLo:40 mg/kg/2W-I:CVS AIMDAP 145,2051,85

orl-hmn TDLo:9600 mg/kg/8W:CNS,PUL JAMAAP 238,884,77

orl-wmn TDLo:409 g/kg/14Y:CNS JAMAAP 237,2093,77

orl-man TDLo:88 mg/kg/10D-I:SYS GASTAB 70,1136,76

orl-wmn TDLo:32 mg/kg/2D:SKN DICPBB 16,615,82

mul-man LDLo:30 mg/kg/2D-I:CVS,PUL AIMEAS  
16,571,42

orl-rat LD50:456 mg/kg ARZNAD 18,1127,68

ipr-rat LDLo:140 mg/kg TXAPA9 1,156,59

scu-rat LD50:610 mg/kg ARZNAD 18,1127,68

ivn-rat LD50:56 mg/kg ARZNAD 18,1127,68

orl-mus LD50:540 mg/kg JPETAB 136,114,62

ipr-mus LD50:165 mg/kg CYLPDN 6,213,85

ivn-mus LD50:54 mg/kg AIPTAK 105,221,56

ivn-dog LDLo:19 mg/kg DECRDP 10,197,84

ivn-cat LD50:22 mg/kg AEPPAE 192,639,39

ivn-rbt LDLo:26 mg/kg DECRDP 10,197,84

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by intraperitoneal and intravenous routes. Moderately toxic by ingestion and subcutaneous routes. Human systemic effects: arrhythmias, cholestatic conjunctive irritation, cyanosis, death, distorted perceptions, dyspnea, fever, hallucinations, hepatitis, increased body temperature, irritative dermatitis, jaundice, joints effects, liver function impairment, other vascular and pulmonary changes, somnolence, transaminases changes, tremors, tumors. When heated to decomposition it emits very toxic fumes of  $\text{NO}_x$  and  $\text{SO}_x$ . See also QUINIDINE.

**QHJ000 CAS: 130-95-0 HR: 3**  
**QUININE**

mf:  $\text{C}_{20}\text{H}_{24}\text{N}_2\text{O}_2$  mw: 324.46

**PROP:** Bulky, white, amorphous powder or crystals; bitter taste. Mp:  $174.9^\circ$ . Sol in  $\text{H}_2\text{O}$ , EtOH,  $\text{C}_6\text{H}_6$ , and  $\text{CHCl}_3$ .

**SYNS:** CHININ (GERMAN)  $\square$  (8- $\alpha$ ,9R)-6'-METHOXYCINCHONAN-9-OL  $\square$  6-METHOXYCINCHONINE  $\square$   $\alpha$ -(6-METHOXY-4-QUINOYL)-5-VINYL-2-QUINCLIDINEMETHANOL  $\square$  (-)-QUININE

#### TOXICITY DATA with REFERENCE:

dnd-esc 30  $\mu\text{mol/L}$  MUREAV 89,95,81

dnd-mam:lym 100  $\mu\text{mol/L}$  PMSBA4 2,134,71

orl-wmn TDLo:74 mg/kg:EYE,EAR,GIT AJOPAA  
90,403,80

unr-man LDLo:294 mg/kg 85DCAI 2,73,70

orl-rat LDLo:800 mg/kg JPETAB 100,408,50

scu-rat LDLo:200 mg/kg AEPPAE 205,129,48

ims-rat LDLo:300 mg/kg JPETAB 63,122,38

ipr-mus LD50:115 mg/kg ARZNAD 35,1760,85

scu-mus LDLo:200 mg/kg AEPPAE 205,129,48

scu-dog LDLo:180 mg/kg HBAMAK 4,1320,35

scu-cat LDLo:100 mg/kg AEPPAE 205,129,48

ivn-cat LDLo:100 mg/kg RIMAAX 11,3,32

orl-rbt LDLo:500 mg/kg RIMAAX 11,3,32

scu-rbt LDLo:231 mg/kg HBAMAK 4,1320,35

ivn-rbt LDLo:70 mg/kg HBAMAK 4,1320,35

orl-gpg LD50:1800 mg/kg SMWOAS 84,351,54

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Human poison by unspecified route. Experimental poison by subcutaneous, intravenous, intramuscular, and intraperitoneal routes. Moderately toxic experimentally by ingestion. An experimental teratogen. Human systemic effects by ingestion: visual field changes, tinnitus, and nausea or vomiting. Human teratogenic effects by ingestion: developmental abnormalities of the

central nervous system, body wall, and musculoskeletal, cardiovascular, and hepatobiliary systems. Experimental reproductive effects. Mutation data reported. Can cause temporary loss of vision. Quinine dermatitis is an occupational hazard to barbers particularly, and generally to people who work with quinine tonics, medicaments, or cosmetics. An irritant to mucous membranes. Combustible when exposed to heat or flame. Decomposes on exposure to light. When heated to decomposition it emits toxic fumes of  $\text{NO}_x$ . Used to treat malaria.

**QIJ000 CAS: 60-93-5 HR: 3**  
**QUININE DIHYDROCHLORIDE**

mf:  $\text{C}_{20}\text{H}_{24}\text{N}_2\text{O}_2 \cdot 2\text{ClH}$  mw: 397.38

**PROP:** White needles or crystalline powder; odorless with very bitter taste. Mp:  $180\text{--}185^\circ$ . Sol in water, alc, glycerin; sltly sol in chloroform; very sltly sol in ether.

**SYNS:** ACID QUININE HYDROCHLORIDE  $\square$  CHININDI-HYDROCHLORID (GERMAN)  $\square$  6'-METHOXYCINCHONAN-9-OL DIHYDROCHLORIDE  $\square$  QUININE BIMURIATE  $\square$  (-)-QUININE DIHYDROCHLORIDE

#### TOXICITY DATA with REFERENCE:

mma-sat 2800 nmol/plate MUREAV 66,33,79

orl-rat LD50:1392 mg/kg JPETAB 91,157,47

ivn-rat LD50:78 mg/kg JPETAB 91,157,47

orl-mus LD50:660 mg/kg JPETAB 91,157,47

ivn-mus LD50:96 mg/kg JPETAB 91,157,47

orl-rbt LD50:640 mg/kg JPETAB 91,157,47

ivn-rbt LD50:35 mg/kg JPETAB 91,157,47

scu-gpg LDLo:199 mg/kg PSEBAA 32,595,35

ivn-gpg LD50:57 mg/kg JPETAB 91,157,47

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by intravenous and subcutaneous routes. Moderately toxic by ingestion. Mutation data reported. When heated to decomposition it emits very toxic fumes of  $\text{NO}_x$  and HCl. See also QUININE.

**QIS000 CAS: 73771-81-0 HR: 3**  
**QUININE ETHIODIDE**

mf:  $\text{C}_{22}\text{H}_{29}\text{N}_2\text{O}_2 \cdot \text{I}$  mw: 480.43

**SYNS:** (8- $\alpha$ ,9R)-1-ETHYL-9-HYDROXY-6'-METHOXYCINCHONAN-1-IUM IODIDE  $\square$  6-(1-HYDROXY-1-(6-METHOXY-4-QUINOLINYL)METHYL)-1-ETHYL-3-VINYLUQUINCLIDINIUM, IODIDE  $\square$  6-(HYDROXY(6-METHOXY-4-QUINOLINYL)-METHYL)-1-ETHYL-3-VINYLUQUINCLIDINIUM, IODIDE

#### TOXICITY DATA with REFERENCE:

ivn-rat LDLo:23 mg/kg JPETAB 91,127,47

ivn-rbt LDLo:9 mg/kg JPETAB 91,127,47

**SAFETY PROFILE:** Poison by intravenous route. When heated to decomposition it emits very toxic fumes of  $\text{I}^-$  and  $\text{NO}_x$ . See also QUININE and IODIDES.

**QIS300 CAS: 130-90-5 HR: 3**  
**QUININE FORMATE**

mf:  $\text{C}_{20}\text{H}_{24}\text{N}_2\text{O}_2 \cdot \text{CH}_2\text{O}_2$  mw: 370.49

**PROP:** White, crystalline powder. Mp:  $113^\circ$ . Sol in 30 parts water, in alc, and chloroform; sltly in ether.

**SYNS:** FORMIC ACID, compounded with QUININE (1:1)  $\square$  QUININE, FORMATE (SALT)  $\square$  QUINOFORM

#### TOXICITY DATA with REFERENCE:

ims-dog LD50:290 mg/kg THERAP 26,563,71

**SAFETY PROFILE:** Poison by intramuscular route. Experimental reproductive effects. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QJJ100 CAS: 549-49-5 HR: 3**  
**QUININE HYDROBROMIDE**

mf: C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>•BrH mw: 405.38

**PROP:** Monohydrate: white, odorless, bitter, silky, hygroscopic needles. Mp: 200°. Darkens in light. Sol in water, alc, chloroform, and glycerol; sltly sol in ether.

**SYNS:** BROMOQUIN □ CHININ HYDROBROMID (GERMAN)

**TOXICITY DATA with REFERENCE:**

orl-rbt LDLo:750 mg/kg FDWU\*\* -,31

scu-rbt LDLo:250 mg/kg FDWU\*\* -,31

orl-pgn LDLo:6 g/kg FDWU\*\* -,31

scu-pgn LDLo:1 g/kg FDWU\*\* -,31

orl-frg LDLo:30 g/kg FDWU\*\* -,31

scu-frg LDLo:18 g/kg FDWU\*\* -,31

**SAFETY PROFILE:** Poison by subcutaneous route. Moderately toxic by ingestion. When heated to decomposition it emits toxic fumes of NO<sub>x</sub> and HBr. See also QUININE.

**QJS000 CAS: 130-89-2 HR: 3**  
**QUININE HYDROCHLORIDE**

mf: C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>•ClH mw: 360.92

**PROP:** Needles. Mp: 158–160° (anhyd).

**SYNS:** QUININE CHLORIDE □ QUININE MONOHYDRO-CHLORIDE □ QUININE MURIATE

**TOXICITY DATA with REFERENCE:**

mnt-mus-orl 110 mg/kg TXCYAC 26,173,83

sce-mus-orl 75 mg/kg TXCYAC 26,173,83

ivn-hmn LDLo:230 µg/kg:CNS,GIT AEXPBL 17,363,1883

orl-rat LD50:620 mg/kg FMCHA2 -,C218,91

ipr-rat LD50:170 mg/kg TXAPA9 24,37,73

scu-rat LDLo:790 mg/kg ZGEMAZ 11,257,20

ivn-rat LDLo:75 mg/kg JPETAB 63,122,38

ims-rat LDLo:300 mg/kg JPETAB 63,122,38

orl-mus LD50:1160 mg/kg BJPCAL 6,185,51

ipr-mus LD50:240 mg/kg TXAPA9 24,37,73

scu-mus LDLo:700 mg/kg JPETAB 8,53,16

ivn-mus LD50:68,300 µg/kg TXAPA9 1,454,56

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by ingestion, subcutaneous, intravenous, intramuscular, and intraperitoneal routes. Human systemic effects by intravenous route: convulsions or effect on seizure threshold, muscle contraction or spasticity, and nausea or vomiting. Mutation data reported. Used as a local anesthetic. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub> and HCl. See also QUININE.

**QMA000 CAS: 804-63-7 HR: 3**  
**QUININE SULFATE**

mf: C<sub>20</sub>H<sub>24</sub>N<sub>2</sub>O<sub>2</sub>•O<sub>4</sub>S mw: 420.52

**PROP:** White needlelike fine crystals; odorless with a very bitter taste. Mp: 205°. Sol in water, alc; sltly sol in chloroform.

**SYNS:** QUININE BISULFATE □ QUININE HYDROGEN SULFATE

**TOXICITY DATA with REFERENCE:**

pic-esc 100 µg/plate CNREA8 43,2819,83

orl-man TDLo:129 mg/kg:EYE HUTODJ 3,399,84

orl-man TDLo:27 mg/kg:EYE,EAR BMJOAE 287,1700,83

orl-wmn TDLo:12 mg/kg/1D-I:LIV BMJOAE 286,264,83

orl-wmn LDLo:220 mg/kg CTOXAO 7,129,74

orl-hmn TDLo:4300 µg/kg:BLD,PNS BMJOAE 1,605,77

orl-wmn TDLo:80 mg/kg:EYE,EAR,GIT BMJOAE 287,1700,83

orl-mus LDLo:800 mg/kg JPETAB 78,159,43

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Human poison by ingestion. Human systemic effects by ingestion: acuity changes, blood agranulocytosis, fibrous hepatitis, flaccid paralysis without anesthesia, motor activity changes, mydriasis (pupillary dilation), nausea or vomiting, tinnitus, visual field changes. Experimental reproductive effects. Mutation data reported. When heated to decomposition it emits very toxic fumes of SO<sub>x</sub> and NO<sub>x</sub>. See also QUININE.

**QMA100 CAS: 76578-14-8 HR: 2**  
**QUINOFOP-ETHYL**

mf: C<sub>19</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>4</sub> mw: 372.83

**SYNS:** ASSURE □ 2-(4-((6-CHLORO-2-QUINOXALINYL)OXY)-PHENOXY)PROPANOIC ACID ETHYL ESTER □ DPX-Y 6202 □ ETHYL 2-(4-(6-CHLORO-2-QUINOXALINYOXY)PHENOXY)-PROPANOATE □ EXP 3864 □ FBC 32197 □ NC 302 □ NCI 96683 □ PILOT □ PROPANOIC ACID, 2-(4-((6-CHLORO-2-QUINOXALINYL)OXY)PHENOXY)-, ETHYL ESTER □ QUIZALOFOP-ETHYL □ TARGA □ XYLOFOP-ETHYL

**TOXICITY DATA with REFERENCE:**

orl-rat LD50:1480 mg/kg 85JFAN A541,85

skn-rat LD50:1852 mg/kg DOVEAA 40(240),17,86

ipr-rat LD50:2510 mg/kg NNGADV 16,315,91

scu-rat LD50:>10 g/kg JPIFAN (48),13,86

orl-mus LD50:2350 mg/kg 85JFAN A541,85

skn-mus LD50:10 g/kg 85JFAN A541,85

ipr-mus LD50:641 mg/kg NNGADV 16,315,91

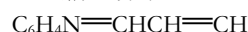
scu-mus LD50:>10 g/kg JPIFAN (48),13,86

**SAFETY PROFILE:** Moderately toxic by ingestion, skin contact, and intraperitoneal routes. When heated to decomposition it emits toxic vapors of NO<sub>x</sub> and Cl<sup>-</sup>.

**QMJO00 CAS: 91-22-5 HR: 3**  
**QUINOLINE**

**DOT:** UN 2656

mf: C<sub>9</sub>H<sub>7</sub>N mw: 129.17



**PROP:** Refractive, colorless liquid; peculiar odor. Mp: -14.5°, fp: -15.6°, bp: 237.7°, d: 1.0900 @ 25°/4°, autoign temp: 896°F, vap press: 1 mm @ 59.7°, vap d: 4.45. Sol in water, CS<sub>2</sub>; misc in alc, ether.

**SYNS:** 1-AZANAPHTHALENE □ B-500 □ 1-BENZAZINE □ 1-BENZINE □ BENZO(b)PYRIDINE □ CHINOLEINE □ CHINOLIN □ CHINOLINE □ LEUCOL □ LEUCOLINE □ LEUKOL □ USAF EK-218

**TOXICITY DATA with REFERENCE:**

skn-rbt 10 mg/24H open MLD AMIHBC 4,119,51

eye-rbt 250 µg open SEV AMIHBC 4,119,51  
 mma-sat 1 µmol/plate ABCHA6 42,861,78  
 dnd-esc 30 µmol/L MUREAV 89,95,81  
 mma-ham:ovr 80 µmol/L ENMUDM 4,395,82  
 sce-ham:ovr 110 µg/L ENMUDM 7,1,85  
 orl-rat LD50:331 mg/kg 85JCAE -,848,86  
 ipr-mus LDLo:64 mg/kg CBCCT\* 2,190,50  
 skn-rbt LD50:540 mg/kg AMIHBC 4,119,51  
 scu-rbt LDLo:200 mg/kg HBAMAK 4,1289,35  
 scu-frg LDLo:150 mg/kg HBAMAK 4,1289,35  
**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program. Community Right-To-Know List.

**DOT CLASSIFICATION:** 6.1; Label: KEEP AWAY FROM FOOD

**SAFETY PROFILE:** Poison by ingestion, subcutaneous, and intraperitoneal routes. Moderately toxic by skin contact. A skin and severe eye irritant. Mutation data reported. Questionable carcinogen with experimental neoplastigenic and tumorigenic data. It can cause retinitis similar to that caused by naphthalene but without causing opacity of the lens. Combustible when exposed to heat or flame. Its preparation has caused many industrial explosions. Potentially explosive reaction with hydrogen peroxide. Violent reaction with dinitrogen tetraoxide, perchromates. Incompatible with linseed oil + thionyl chloride, maleic anhydride. Unpredictably violent. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QMS000** **CAS:** **HR: 3**

### 6-QUINOLINE CARBONYL AZIDE

mf: C<sub>10</sub>H<sub>6</sub>N<sub>4</sub>O mw: 198.19

**PROP:** Mp 88°C.

**SAFETY PROFILE:** Explodes when heated above 88°C. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>. See also AZIDES.

**QMS100** **CAS:** **HR: 2**

### 8-QUINOLINECARBOXYLIC ACID, 3,7-DICHLORO-

mf: C<sub>10</sub>H<sub>5</sub>Cl<sub>2</sub>NO<sub>2</sub> mw: 242.06

**PROP:** Solid. Mp: 278–280°.

**SYNS:** BAS 514 00H □ 3,7-DICHLOROQUINOLINE-8-CARBOXYLIC ACID □ FACET □ QUINCLORAC □ QUINCLORAC TECH

#### TOXICITY DATA with REFERENCE:

orl-rat LD50:2190 mg/kg NNGADV 15,647,90

ihl-rat LC50:>5170 mg/m<sup>3</sup> NNGADV 15,647,90

skn-rat LD50:>2 g/kg

NNGADV 15,647,90

orl-mus LD50:5 g/kg NNGADV 15,647,90

**SAFETY PROFILE:** Moderately toxic by ingestion and skin contact routes. Low toxicity by inhalation route. When heated to decomposition it emits toxic vapors of NO<sub>x</sub> and Cl<sup>-</sup>.

**QMS200** **CAS:** **HR: 3**

### QUINOLINE, 2-(2-CHLOROETHYLAMINO)-, HYDROCHLORIDE

mf: C<sub>11</sub>H<sub>11</sub>ClN<sub>2</sub>•ClH mw: 243.15

**SYN:** TL 1120

#### TOXICITY DATA with REFERENCE:

ihl-mus LCLo:640 mg/m<sup>3</sup>/10M NDRC\*\* No.9-4-1-19,43

**SAFETY PROFILE:** A poison by inhalation. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>, HCl, and Cl<sup>-</sup>.

**QNA000** **CAS:** **HR: D**

### 2,4-QUINOLINEDIOL

mf: C<sub>9</sub>H<sub>7</sub>NO<sub>2</sub> mw: 161.17

#### TOXICITY DATA with REFERENCE:

mma-sat 1 mg/plate JNCIAM 60,405,78

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QNA100** **CAS:** **HR: D**

### trans-QUINOLINE-5,6,7,8-DIOXIDE

mf: C<sub>9</sub>H<sub>7</sub>NO<sub>2</sub> mw: 161.17

**SYNS:** BISOXIRENO(f,h)QUINOLINE, 1A,1B,2A,6B-TETRAHYDRO-, (1A-α-1B-β,2A-β,6Bα)-(+)- □ 1A,1B,2A,6B-TETRAHYDROBISOXIRENO(f,h)QUINOLINE (1a-α-1b-β,2a-β,6b)α-(+)-

#### TOXICITY DATA with REFERENCE:

mic-bac-sat 600 nmol/plate MUREAV 278,227,92

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QNJ000** **CAS:** **HR: 2**

### 2-QUINOLINEETHANOL

mf: C<sub>11</sub>H<sub>11</sub>NO mw: 173.23

**SYN:** 2-(2-HYDROXYETHYL)QUINOLINE

#### TOXICITY DATA with REFERENCE:

ipr-mus LDLo:500 mg/kg CBCCT\* 5,288,53

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QNJ200** **CAS:** **HR: D**

### QUINOLINE-7,8-OXIDE

mf: C<sub>9</sub>H<sub>7</sub>NO mw: 145.17

**SYNS:** 1A,7B-DIHYDROOXIRENO(H)QUINOLINE (+)- □ OXIRENO(H)QUINOLINE, 1A,7B-DIHYDRO-, (+)-

#### TOXICITY DATA with REFERENCE:

mic-bac-sat 200 nmol/plate MUREAV 278,227,92

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QOJ000** **CAS:** **HR: D**

### 2-QUINOLINE THIOACETAMIDE HYDROCHLORIDE

mf: C<sub>11</sub>H<sub>10</sub>N<sub>2</sub>S•ClH mw: 238.75

**SAFETY PROFILE:** An experimental teratogen. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub>, SO<sub>x</sub>, and HCl.

**QOJ100** **CAS:** **HR: 2**

### 2-QUINOLINETHIOL

mf: C<sub>9</sub>H<sub>7</sub>NS mw: 161.23

**SYNS:** CARBOSTYRIL, THIO- □ 2-MERCAPTOQUINOLINE □ 2(1H)-QUINOLINETHIONE □ THIOCARBOSTYRIL

**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:450 mg/kg RAREAE 7,13,57

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. When heated to decomposition it emits toxic vapors of NO<sub>x</sub> and SO<sub>x</sub>.**QOJ200 CAS: 89-00-9 HR: 3  
QUINOLINIC ACID**mf: C<sub>7</sub>H<sub>5</sub>NO<sub>4</sub> mw: 167.13**SYNS:** CL 9140 □ 2,3-PYRIDINEDICARBOXYLIC ACID**TOXICITY DATA with REFERENCE:**

skn-rbt 500 mg/24H MLD NTIS\*\* OTS0540157

orl-rat LD50:&gt;500 mg/kg NTIS\*\* OTS0540157

skn-rbt LD50:&gt;200 mg/kg NTIS\*\* OTS0540157

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.**SAFETY PROFILE:** A poison by skin contact. Moderately toxic by ingestion. Experimental reproductive effects. A mild skin irritant. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.**QOJ250 CAS: 50308-94-6 HR: 3  
QUINOLINIUM DIBROMIDE**mf: C<sub>20</sub>H<sub>28</sub>N<sub>6</sub>O•2Br mw: 636.45**SYNS:** CAIN'S QUINOLINIUM □ NSC-176319 □ QUINOLINIUM, 6-AMINO-1-METHYL-4-((4-(((1-METHYLPYRIDINIUM-4-YL)AMINO)PHENYL)CARBAMOYL)PHENYL)AMINO)-, DIBROMIDE**TOXICITY DATA with REFERENCE:**

dnd-mus:lym 660 nmol/L JMC MAR 22,134,79

dnd-mam:lym 67 mg/L PHMGBN 17,61,78

ipr-mus LD50:7399 µg/kg NCISP\* JAN86

scu-mus LD50:35,910 µg/kg NCISP\* JAN86

**SAFETY PROFILE:** Poison by subcutaneous and intraperitoneal routes. Mutation data reported. When heated to decomposition it emits toxic fumes of Br<sup>-</sup> and NO<sub>x</sub>.**QPA000 CAS: 148-24-3 HR: 3  
8-QUINOLINOL**mf: C<sub>9</sub>H<sub>7</sub>NO mw: 145.17**PROP:** White crystals or powder. Needles from EtOH (aq). Mp: 76°, bp: 267°. Very sltly sol in cold water; sltly sol in ether; sol in alc, dilute alkali.**SYNS:** BIOQUIN □ FENNOSAN □ HYDROXYBENZOPYRIDINE □ 8-HYDROXY-CHINOLIN (GERMAN) □ 8-HYDROXY-QUINOLINE □ NCI-C55298 □ 8-OQ □ OXINE □ OXYBENZOPYRIDINE □ OXYCHINOLIN □ o-OXYCHINOLIN (GERMAN) □ OXYQUINOLINE □ 8-OXYQUINOLINE □ PHENOPYRIDINE □ 8-QUINOL □ QUINOPHENOL □ TUMEX □ USAF EK-794**TOXICITY DATA with REFERENCE:**

skn-rbt 500 mg/24H MLD JACTDZ 11,497,92

eye-rbt 100 mg MLD JACTDZ 11,497,92

dni-hmn:hla 25 µmol/L MUREAV 92,427,82

bfa-rat/sat 600 mg/kg TXCYAC 34,231,85

ivg-rat TDLo:33 g/kg/82W-I:ETA,REP ARPAAQ 79,245,65

scu-mus TDLo:900 mg/kg/21W-I:ETA,REP VOONAW 16(8),67,70

skn-mus TDLo:7200 mg/kg/50W-I:ETA,REP VOONAW 16(8),67,70

orl-rat TDLo:29 g/kg/48W-I:ETA,REP JNCIAM 41,985,68

orl-rat LD50:1200 mg/kg PCOC\*\* -,602,66

orl-mus LD50:20 g/kg NIIRDN 6,271,82

ipr-mus LD50:43 mg/kg FATOAO 42(4),396,79

scu-mus LD50:83,600 µg/kg PHARAT 1,150,46

orl-gpg LD50:1205 mg/kg TJADAB 20,413,79

**CONSENSUS REPORTS:** IARC Cancer Review:

Group 3 IMEMDT 7,56,87; Animal Inadequate Evidence IMEMDT 13,101,77. NTP Carcinogenesis Studies (feed); No Evidence: mouse, rat NTPTR\* NTP-TR-276,85.

Reported in EPA TSCA Inventory. EPA Genetic Toxicology Program.

**SAFETY PROFILE:** Poison by intraperitoneal and subcutaneous routes. Moderately toxic by ingestion. Questionable carcinogen with experimental carcinogenic, neoplastigenic, and tumorigenic data. Experimental reproductive effects. A central nervous system stimulant. Human mutation data reported. Combustible when exposed to heat or flame. When heated to decomposition it emits highly toxic fumes of NO<sub>x</sub>.**QPJ000 CAS: 63716-63-2 HR: 3  
8-QUINOLINIUM-4',7'-DIBROMO-3'-HYDROXY-2'-NAPHTHOATE**mf: C<sub>20</sub>H<sub>13</sub>Br<sub>2</sub>NO<sub>3</sub> mw: 475.16**TOXICITY DATA with REFERENCE:**

sce-hmn:fbr 5 mg/L MUREAV 58,317,78

ipr-mus LD50:85 mg/kg TXAPA9 5,599,63

**SAFETY PROFILE:** Poison by intraperitoneal route. Human mutation data reported. When heated to decomposition it emits very toxic fumes of Br<sup>-</sup> and NO<sub>x</sub>.**QPS000 CAS: 134-31-6 HR: 3  
8-QUINOLINOL SULFATE (2:1) (SALT)**mf: C<sub>18</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>•H<sub>2</sub>O<sub>4</sub>S mw: 388.42**PROP:** Pale-yellow crystals. Mp: 175–178°.**SYNS:** 8-HYDROXY-CHINOLIN-SULFAT (GERMAN) □ 8-HYDROXYQUINOLINE SULFATE □ OXINE SULFATE □ OXYQUINOLINE SULFATE □ 8-QUINOLINOL HYDROGEN SULFATE (2:1) □ 8-QUINOLINOL SULFATE**TOXICITY DATA with REFERENCE:**

mma-sat 20 µg/plate MUREAV 39,285,77

sce-hmn:lym 10 µmol/L ENMUDM 2,191,80

orl-rat LD50:1200 mg/kg FMCHA2 -,C67,91

skn-rat LD50:&gt;4 g/kg 85JFAN A229,83

orl-mus LD50:280 mg/kg 85DPAN -,71/76

orl-mam LD50:1200 mg/kg FMCHA2 -,D56,77

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.**SAFETY PROFILE:** Poison by ingestion. Human mutation data reported. When heated to decomposition it emits very toxic fumes of SO<sub>x</sub> and NO<sub>x</sub>. See also 8-QUINOLINOL.**QPS100 CAS: 14683-61-5 HR: D  
8-QUINOLINYL GLUCURONIDE**mf: C<sub>15</sub>H<sub>15</sub>NO<sub>7</sub> mw: 321.31**SYNS:** β-d-GLUCOPYRANOSIDURONIC ACID, 8-QUINOLYL- □ GLUCOPYRANOSIDURONIC ACID, 8-QUINOLYL, β-d- □

QUINOLYL GLUCURONIDE □ 8-HYDROXYQUINOLINE  
GLUCURONIDE

**TOXICITY DATA with REFERENCE:**

mic-sat 130 nmol/plate PNASA6 77,4961,1980

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QPS200 CAS: 22433-76-7 HR: D**

**N-6-QUINOLYLACETAMIDE**

mf: C<sub>11</sub>H<sub>10</sub>N<sub>2</sub>O mw: 186.23

**SYNS:** ACETAMIDE, N-6-QUINOLINYL- □ 6-

ACETAMIDOQUINOLINE □ ACETAMIDE, N-6-QUINOLYL- □  
6-ACETYLAMINOQUINOLINE □ QUINOLINE, 6-ACETAMIDO-

**TOXICITY DATA with REFERENCE:**

mic-sat 2500 nmol/plate MUREAV 187,191,1987

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QQA000 CAS: 63040-20-0 HR: 2**

**N-(4-QUINOLYL)ACETOHYDROXAMIC ACID**

mf: C<sub>11</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub> mw: 202.23

**SYN:** MONOACETYL 4-HYDROXYAMINOQUINOLINE

**SAFETY PROFILE:** Questionable carcinogen with experimental neoplastigenic data. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QQS075 CAS: 11001-74-4 HR: 3**

**QUINOMYCIN C**

mf: C<sub>55</sub>H<sub>72</sub>N<sub>12</sub>O<sub>12</sub>S<sub>2</sub> mw: 1157.51

**SYNS:** ANTIBIOTIC U 48160 □ 4-(N,4-DIMETHYL-1-ALLOISO-  
LEUCINE)-8-(N,4-DIMETHYL-1-ALLOISOLEUCINE)QUINOM-  
YCIN A □ U 48160

**TOXICITY DATA with REFERENCE:**

orl-mus LD50:5 mg/kg 85GDA2 4(2),83,80

ipr-mus LD50:25 µg/kg 85FZAT -,550,67

scu-mus LD50:790 µg/kg 85GDA2 4(2),83,80

ivn-mus LD50:480 µg/kg 85GDA2 4(2),83,80

**SAFETY PROFILE:** Poison by ingestion, subcutaneous, intravenous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO<sub>x</sub> and SO<sub>x</sub>.

**QQS200 CAS: 106-51-4 HR: 3**

**QUINONE**

**DOT:** UN 2587

mf: C<sub>6</sub>H<sub>4</sub>O<sub>2</sub> mw: 108.10



**PROP:** Yellow crystals; characteristic chlorine-like odor from pet ether or water. Mp: 115.7°, bp: sublimes, d: 1.318 @ 20°/4°. Sol in EtOH and Et<sub>2</sub>O; very spar sol in H<sub>2</sub>O. IDLH 100 mg/m<sup>3</sup>.

**SYNS:** BENZO-CHINON (GERMAN) □ 1,4-BENZOQUINE □ BENZOQUINONE (DOT) □ p-BENZOQUINONE □ 1,4-BENZO-  
QUINONE □ CHINON (DUTCH, GERMAN) □ p-CHINON  
(GERMAN) □ CHINONE □ CYCLOHEXADIENEDIONE □ 1,4-  
CYCLOHEXADIENEDIONE □ 2,5-CYCLOHEXADIENE-1,4-  
DIONE □ 1,4-CYCLOHEXADIENE DIOXIDE □ 1,4-DIOSSI-  
BENZENE (ITALIAN) □ 1,4-DIOXYBENZENE □ 1,4-DIOXY-  
BENZOL (GERMAN) □ NCI-C55845 □ p-QUINONE □ RCRA  
WASTE NUMBER U197 □ USAF P-220

**TOXICITY DATA with REFERENCE:**

oms-hmn:lym 5 µmol/L CNREA8 45,2471,85

sce-hmn:lum 5 µmol/L CNREA8 45,2471,85

orl-rat LD50:130 mg/kg FEPRA7 8,348,49

ivn-rat LD50:25 mg/kg FEPRA7 8,348,49

unr-rat LD50:5600 µg/kg RPTOAN 41,146,78

ipr-mus LD50:8500 µg/kg BCPA6 12,885,63

scu-uns LD50:296 mg/kg 85GMAT -,25,82

**CONSENSUS REPORTS:** IARC Cancer Review:

Group 3 IMEMDT 7,56,87; Animal Inadequate Evidence  
IMEMDT 15,255,77. Reported in EPA TSCA Inventory.  
Community Right-To-Know List. EPA Genetic  
Toxicology Program.

**OSHA PEL:** TWA 0.1 ppm

**ACGIH TLV:** TWA 0.1 ppm

**DFG MAK:** 0.1 ppm (0.45 mg/m<sup>3</sup>)

**DOT CLASSIFICATION:** 6.1; Label: Poison

**SAFETY PROFILE:** Poison by ingestion, subcutaneous, intraperitoneal, and intravenous routes. Questionable carcinogen with experimental tumorigenic data by skin contact. Human mutation data reported. Quinone has a characteristic, irritating odor. Causes severe damage to the skin and mucous membranes by contact with it in the solid state, in solution, or in the form of condensed vapors. Locally, it causes discoloration, severe irritation, erythema, swelling, and the formation of papules and vesicles, whereas prolonged contact may lead to necrosis. When the eyes become involved, it causes dangerous disturbances of vision. The moist material self-heats and decomposes exothermically above 60°C. When heated to decomposition it emits acrid smoke and fumes.

**QQS300 CAS: 161697-02-5 HR: D**

**6-QUINOXALINAMINE, N,5-DIMETHYL-3-PHENYL-**

mf: C<sub>16</sub>H<sub>15</sub>N<sub>3</sub> mw: 249.34

**SYNS:** N,5-DIMETHYL-3-PHENYL-6-QUINOXALINAMINE □ 5-  
METHYL-6-METHYLAMINO-3-PHENYLQUINOXALINE

**TOXICITY DATA with REFERENCE:**

mic-bac-sat 20 nmol/plate MUREAV 346,99,95

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QQS330 CAS: 161697-04-7 HR: D**

**6-QUINOXALINAMINE, N,N,2,3,5-PENTAMETHYL-**

mf: C<sub>13</sub>H<sub>17</sub>N<sub>3</sub> mw: 215.33

**SYNS:** 6-DIMETHYLAMINO-2,3,5-TRIMETHYLAMINOQUIN-  
OXALINE □ N,N,2,3,5-PENTAMETHYL-6-QUINOXALINAMINE

**TOXICITY DATA with REFERENCE:**

mic-bac-sat 10 nmol/plate MUREAV 346,99,95

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QQS340 CAS: 161697-03-6 HR: D**

**6-QUINOXALINAMINE, 2,3,5-TRIMETHYL-**

mf: C<sub>11</sub>H<sub>13</sub>N<sub>3</sub> mw: 187.27

**SYNS:** 6-AMINO-2,3,5-TRIMETHYLQUINOXALINE □ 2,3,5-  
TRIMETHYL-6-QUINOXALINAMINE

**TOXICITY DATA with REFERENCE:**

mic-bac-sat 20 nmol/plate MUREAV 346,99,95

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QRJ000 CAS: 91-19-0 HR: 3**  
**QUINOXALINE**

mf: C<sub>8</sub>H<sub>6</sub>N<sub>2</sub> mw: 130.16

**PROP:** Crystals (anhyd) from pet ether. D: 1.133 @ 45°/4°, mp: 29–30°, bp: 225–226°. Sol in water; misc in alc, ether, benzene.

**SYNS:** 1,4-BENZODIAZINE □ BENZOPARADIAZINE □ BENZO(A)PYRAZINE □ 1,4-DIAZANAPHTHALENE □ QUINAZINE □ USAF EK-7094

**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:250 mg/kg NTIS\*\* AD607-952

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by intraperitoneal route. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QRJ100 CAS: 20128-12-5 HR: D**  
**2,3-QUINOXALINEDIMETHANOL, DIACETATE**

mf: C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>O<sub>4</sub> mw: 274.30

**SYN:** 2,3-BIS(ACETOXYMETHYL)QUINOXALINE

**TOXICITY DATA with REFERENCE:**

mic-bac-sat 1 g/plate PCJOAU 12,35,78

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QRS000 CAS: 15804-19-0 HR: 3**  
**2,3-QUINOXALINEDIOL**

mf: C<sub>8</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub> mw: 162.16

**PROP:** Needles from H<sub>2</sub>O. Mp: >360°.

**SYNS:** 2,3-DIHYDROXYQUINOXALINE □ USAF EK-6232

**TOXICITY DATA with REFERENCE:**

ipr-rat LDLo:500 mg/kg NCNSA6 5,26,53

ipr-mus LD50:200 mg/kg NTIS\*\* AD607-952

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by intraperitoneal route. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QSA000 CAS: 2423-66-7 HR: 2**  
**QUINOXALINE-1,4-DI-N-OXIDE**

mf: C<sub>8</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub> mw: 162.16

**PROP:** Golden yellow needles from EtOH. Mp: 241–243°.

**SYNS:** GROFAS □ QUINDOXIN □ QUINOXALINE DIOXIDE □ QUINOXALINE DI-N-OXIDE □ QUINOXALINE 1,4-DIOXIDE □ USAF H-1

**TOXICITY DATA with REFERENCE:**

mmo-sat 5 µg/plate CPBTAL 27,1954,79

mma-sat 5 µg/plate CPBTAL 27,1954,79

dnr-sat 100 µg/plate AMACCQ 20,151,81

sce-ham:lng 500 mg/L MUREAV 139,199,84

ipr-mus LD50:500 mg/kg NTIS\*\* AD277-689

**CONSENSUS REPORTS:** EPA Genetic Toxicology Program.

**SAFETY PROFILE:** Moderately toxic by intraperitoneal route. Questionable carcinogen with

experimental carcinogenic data. Mutation data reported. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QJSJ000 CAS: 1199-03-7 HR: 3**  
**2,3-QUINOXALINEDITHIOL**

mf: C<sub>8</sub>H<sub>6</sub>N<sub>2</sub>S<sub>2</sub> mw: 194.28

**PROP:** Crystals. Sol in EtOH, DMF, and Me<sub>2</sub>CO.

**SYNS:** 2,3-QUINOXALINETHIOL □ USAF EK-7317

**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:100 mg/kg NTIS\*\* AD607-952

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by intraperitoneal route. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub> and SO<sub>x</sub>.

**QJSJ050 CAS: 2958-87-4 HR: 3**  
**QUINOXALINE, 2,3,6-TRICHLORO-**

mf: C<sub>8</sub>H<sub>3</sub>Cl<sub>3</sub>N<sub>2</sub> mw: 233.48

**SYN:** 2,3,6-TRICHLOROQUINOXALINE

**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:18 mg/kg CSLNX\* NX#04091

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** A poison by intravenous route. When heated to decomposition it emits toxic vapors of NO<sub>x</sub> and Cl<sup>−</sup>.

**QJSJ100 CAS: 1196-57-2 HR: 3**  
**2-QUINOXALINOL**

mf: C<sub>8</sub>H<sub>6</sub>N<sub>2</sub>O mw: 146.16

**SYN:** 2(1H)-QUINOXALINONE

**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:178 mg/kg CSLNX\* NX#00285

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Poison by intravenous route. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QJSJ800 CAS: 73927-90-9 HR: 3**  
**(2,3-QUINOXALINYLDITHIO)DIMETHYLTIN**

mf: C<sub>10</sub>H<sub>10</sub>N<sub>2</sub>S<sub>2</sub>Sn mw: 341.03

**SYN:** STANNANE, DIMETHYL(2,3-QUINOXALINYLDITHIO)-

**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:180 mg/kg CSLNX\* NX#01824

**OSHA PEL:** TWA 0.1 mg(Sn)/m<sup>3</sup> (skin)

**ACGIH TLV:** TWA 0.1 mg(Sn)/m<sup>3</sup>; STEL 0.2 mg/m<sup>3</sup> (skin)

**NIOSH REL:** (Organotin Compound) 10H TWA 0.1 mg(Sn)/m<sup>3</sup>

**SAFETY PROFILE:** Poison by intravenous route. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>, SO<sub>x</sub>, and Sn.

**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

**QTJ000 CAS: 73927-96-5 HR: 3**  
**(2,3-QUINOXALINYLDITHIO)DIPHENYLTIN**

mf: C<sub>20</sub>H<sub>14</sub>N<sub>2</sub>S<sub>2</sub>Sn mw: 465.17

**SYN:** (2,3-QUINOXALINYLDITHIO)DIPHENYL STANNANE

**TOXICITY DATA with REFERENCE:**

ivn-mus LD50:100 mg/kg CSLNX\* NX#01825

**OSHA PEL:** TWA 0.1 mg(Sn)/m<sup>3</sup> (skin)

**ACGIH TLV:** TWA 0.1 mg(Sn)/m<sup>3</sup>; STEL 0.2 mg(Sn)/m<sup>3</sup> (skin).

**NIOSH REL:** (Organotin Compounds) TWA 0.1 mg(Sn)/m<sup>3</sup>

**SAFETY PROFILE:** Poison by intravenous route. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub> and SO<sub>x</sub>. See also TIN COMPOUNDS.

**ANALYTICAL METHOD:** For occupational chemical analysis use NIOSH: Organotin Compounds 5504.

**QTS000 CAS: 59-40-5 HR: 2**  
**N-(2-QUINOXALINYL)SULFANILAMIDE**

mf: C<sub>14</sub>H<sub>12</sub>N<sub>4</sub>O<sub>2</sub>S mw: 300.36

**PROP:** Sol in alkalis. Mp: 247–248°.

**SYNS:** 2-p-AMINO BENZENESULFONAMIDOQUINOXALINE  
□ 2-p-AMINO BENZENESULFONAMIDOQUINOXALINE □  
N<sup>1</sup>-2-QUINOXALINYL SULFANILAMIDE □ N<sup>2</sup>-2-QUINOXALYL-  
SULFANILAMIDE □ SULFABENZPYRAZINE □ 2-SULFANIL-  
AMIDOQUINOXALINE □ SULFAQUINOXALINE

**TOXICITY DATA with REFERENCE:**

orl-rat TD50:1370 mg/kg MahWM# 16NOV82

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Moderately toxic by ingestion. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub> and SO<sub>x</sub>.

**QTS100 CAS: 10103-89-6 HR: 2**  
**QUINOXIDINE**

mf: C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>O<sub>6</sub> mw: 306.30

**SYNS:** 2,3-BIS(ACETOXYMETHYL)QUINOXALINE DI-N-  
OXIDE □ CHINOXIDIN □ 2,3-QUINOXALINEDIMETHANOL,  
DIACETATE, 1,4-DIOXIDE

**TOXICITY DATA with REFERENCE:**

mic-sat 750 µg/ PCJOAU 12,306,1978

sln-orl-uns-dmg 100 mg/L PCJOAU 12,306,1978

dlt-orl-uns-dmg 100 mg/L PCJOAU 12,306,1978

cyt-hmn-lym 400 mg/L PCJOAU 14,591,1980

cyt-mul-mus 400 mg/L PCJOAU 14,591,1980

hma-mus-sat 1 mg/kg PCJOAU 12,306,1978

orl-mus LD :>500 mg/kg PCJOAU 16,598,1982

**SAFETY PROFILE:** Moderately toxic by ingestion. Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QUJ300 CAS: 32226-69-0 HR: 3**  
**QUINPYRROLIDINE**

mf: C<sub>15</sub>H<sub>18</sub>N<sub>2</sub>O mw: 242.35

**SYN:** 4-(2,1-PYRROLIDINOETHOXY)QUINOLINE  
HYDROCHLORIDE

**TOXICITY DATA with REFERENCE:**

orl-rat LD50:280 mg/kg IJMRAQ 60,604,72

ipr-rat LD50:135 mg/kg IJMRAQ 60,604,72

orl-mus LD50:315 mg/kg IJMRAQ 59,614,71

ipr-mus LD50:123 mg/kg IJMRAQ 60,604,72

**SAFETY PROFILE:** Poison by ingestion and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QUJ400 CAS: 100-76-5 HR: 3**  
**QUINUCLIDINE**

mf: C<sub>7</sub>H<sub>13</sub>N mw: 111.21

**SYNS:** 1-AZABICYCLO(2.2.2)OCTANE □ 1,4-ETHANO-  
PIPERIDINE □ 1,4-ETHYLENEPIPERIDINE

**TOXICITY DATA with REFERENCE:**

skn-rbt 10 µL/24H MOD NTIS\*\* OTS0534531

eye-rbt 5 mg/24H SEV NTIS\*\* OTS0534531

orl-rat LD50:81,200 µg/kg NTIS\*\* OTS0534531

ihl-rat LCLo:2050 ppm/9M NTIS\*\* OTS0534531

skn-rbt LD50:70,700 µg/kg NTIS\*\* OTS0534531

**SAFETY PROFILE:** A poison by ingestion and skin contact. Low toxicity by inhalation. A moderate skin and severe eye irritant. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QUJ990 CAS: 1619-34-7 HR: D**  
**3-QUINUCLIDINOL**

mf: C<sub>7</sub>H<sub>13</sub>NO mw: 127.21

**SYNS:** 1-AZABICYCLO(2.2.2)OCTAN-3-OL (9CI) □ 3-  
HYDROXYQUINUCLIDINE

**TOXICITY DATA with REFERENCE:**

cyt-ham-ipr 10 mg/kg ACNSAX 17,253,75

**CONSENSUS REPORTS:** Reported in EPA TSCA Inventory.

**SAFETY PROFILE:** Mutation data reported. When heated to decomposition it emits toxic vapors of NO<sub>x</sub>.

**QUS000 CAS: 6109-70-2 HR: 3**  
**3-QUINUCLIDINOL ACETATE (ESTER)**  
**HYDROCHLORIDE**

mf: C<sub>9</sub>H<sub>15</sub>NO<sub>2</sub>•ClH mw: 205.71

**PROP:** White crystalline powder.

**SYN:** ACECLIDIN-HCL

**TOXICITY DATA with REFERENCE:**

ipr-rat LD50:105 mg/kg ARZNAD 18,322,68

ipr-mus LD50:116 mg/kg ARZNAD 18,322,68

ivn-mus LD50:27 mg/kg ARZNAD 18,322,68

**SAFETY PROFILE:** Poison by intraperitoneal and intravenous routes. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub> and HCl. See also ESTERS.

**QVA000 CAS: 6581-06-2 HR: 3**  
**3-QUINUCLIDINOL BENZILATE**

mf: C<sub>21</sub>H<sub>23</sub>NO<sub>3</sub> mw: 337.45

**PROP:** Crystals from acetone-ether. Mp: 164–165°

**SYNS:** 1-AZABICYCLO(2.2.2)OCTAN-3-OL, BENZILATE (9CI) □  
BZ □ 3-CHINUCLIDYLBENZILATE □ CS 4030 □ EA 2277 □  
QNB □ 3-QUINUCLIDINYL BENZILATE □ RO 2-3308

**TOXICITY DATA with REFERENCE:**

mno-smc 5 mmol/L ACNSAX 17,252,75

cyt-mus-ipr 30 mg/kg ACNSAX 17,252,75

dlt-mus-ipr 100 mg/kg ACNSAX 17,252,75

cyt-ham-ipr 40 mg/kg/6H-I ACNSAX 17,252,75

ivn-mus LD50:25 mg/kg CSLNX\* NX#11998

**SAFETY PROFILE:** Poison by intravenous route. Mutation data reported. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.

**QVJ000 CAS: 63716-96-1 HR: 3**  
**3-QUINUCLIDINOL, DIPHENYLACETATE (ESTER), HYDROGEN SULFATE (2:1) DIHYDRATE**

mf: C<sub>42</sub>H<sub>46</sub>N<sub>2</sub>O<sub>4</sub>•H<sub>2</sub>O<sub>4</sub>S•2H<sub>2</sub>O mw: 777.02

**SYNS:** AZABICYCLO(2.2.1)OCTAN-3-OL, DIPHENYLACETATE (ester), HYDROGEN SULFATE (2:1) DIHYDRATE □ DIPHENYLACETIC ACID, ESTER with 3-QUINUCLIDINOL, HYDROGEN SULFATE (2:1) DIHYDRATE

**TOXICITY DATA with REFERENCE:**

ipr-mus LD50:159 mg/kg JPETAB 104,284,52

ivn-mus LD50:28 mg/kg JPETAB 104,284,52

ivn-dog LD50:20 mg/kg JPETAB 104,284,52

**SAFETY PROFILE:** Poison by intravenous and intraperitoneal routes. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub> and SO<sub>x</sub>.

**QWJ000 CAS: 13004-56-3 HR: 3**  
**QUINUCLIDYL BENZYLATE**

mf: C<sub>21</sub>H<sub>23</sub>NO<sub>3</sub>•ClH mw: 373.91

**SYNS:** 1-AZABICYCLO(2.2.2)OCTAN-3-OL, BENZYLATE (ESTER), HYDROCHLORIDE □ BENZILIC ACID, 3-QUINUCLIDINYL ESTER, HYDROCHLORIDE □ RO 2-3308

**TOXICITY DATA with REFERENCE:**

scu-hmn TDLo:3 µg/kg:CNS JPETAB 104,284,52

ipr-mus LD50:110 mg/kg JPETAB 104,284,52

ivn-mus LD50:18 mg/kg CSLNX\* NX#03527

ivn-dog LD50:15 mg/kg JPETAB 104,291,52

**SAFETY PROFILE:** Poison by intravenous and intraperitoneal routes. Human systemic effects by subcutaneous route: somnolence and distorted perceptions. When heated to decomposition it emits very toxic fumes of NO<sub>x</sub> and HCl. See also ESTERS.

**QWJ500 CAS: 5786-68-5 HR: 3**  
**QUIPAZINE MALEATE**

mf: C<sub>13</sub>H<sub>15</sub>N<sub>3</sub>•C<sub>4</sub>H<sub>4</sub>O<sub>4</sub> mw: 329.39

**PROP:** Off-white solid. Sol in water, dilute acid or alcohol.

**SYNS:** MA 1291 □ 2-(1-PIPERAZINYL)-QUINOLINE (Z)-2-BUTENEDIOATE (1:1) (9CI) □ 2-(1-PIPERAZINYL)-QUINOLINE MALEATE (1:1)

**TOXICITY DATA with REFERENCE:**

orl-mus LD50:225 mg/kg FATOAO 43(5),530,80

ipr-mus LD50:102 mg/kg FATOAO 43(5),530,80

ivn-mus LD50:75 mg/kg FATOAO 43(5),530,80

**SAFETY PROFILE:** Poison by ingestion, intravenous, and intraperitoneal routes. When heated to decomposition it emits toxic fumes of NO<sub>x</sub>.