

**A
P
P
E
N
D
I
X

A**

**Appendix A:
SARA Title III
Extremely Hazardous
Substances**

APPENDIX A: SARA Title III Extremely Hazardous Substances

**SARA Title III
EXTREMELY HAZARDOUS SUBSTANCES**

CAS	EHS NAME	TPQ*
108054	Acetic acid ethenyl ester	1,000
75865	Acetone cyanohydrin	1,000
1752303	Acetone thiosemicarbazide	1,000/10,000
107028	Acrolein	500
79061	Acrylamide	1,000/10,000
107131	Acrylonitrile	10,000
814686	Acrylyl chloride	100
111693	Adiponitrile	1,000
116063	Aldicarb	100/10,000
309002	Aldrin	500/10,000
107186	Allyl alcohol	1,000
107119	Allylamine	500
20859738	Aluminum phosphide	500
2763964	5-(Aminomethyl)-3-isoxazolol	500/10,000
54626	Aminopterin	500/10,000
504245	4-Aminopyridine	500/10,000
78535	Amiton	500
3734972	Amiton oxalate	100/10,000
7664417	Ammonia	500
300629	Amphetamine	1,000
62533	Aniline	1,000
88051	Aniline, 2,4,6-trimethyl-	500
7783702	Antimony pentafluoride	500
1397940	Antimycin A	1,000/10,000
86884	ANTU	500/10,000
1303282	Arsenic pentoxide	100/10,000
1327533	Arsenic trioxide	100/10,000
1327533	Arsenous oxide	100/10,000
7784341	Arsenous trichloride	500
7784421	Arsine	100
2642719	Azinphos-ethyl	100/10,000
86500	Azinphos-methyl	10/10,000
151564	Aziridine	500
75558	Aziridine, 2-methyl	10,000
98873	Benzal chloride	500
98168	Benzenamine, 3-(trifluoromethyl)-	500
98055	Benzeneearsonic acid	10/10,000
100141	Benzene, 1-(chloromethyl)-4-nitro-	500/10,000
584849	Benzene, 2,4-diisocyanato-1-methyl-	500
91087	Benzene, 1,3-diisocyanato-2-methyl-	100
108985	Benzenethiol	500
3615212	Benzimidazole, 4,5-dichloro-2-(trifluoromethyl)-	500/10,000
98077	Benzoic trichloride	100
98077	Benzotrichloride	100
100447	Benzyl chloride	500
140294	Benzyl cyanide	500
15271417	Bicyclo[2.2.1]heptane-2-carbonitrile, 5-chloro-6-(((methylamino)carbonyl)oxy)imino)-(1-alpha,2-beta,4-alpha,5-alpha,6E))-	500/10,000
1464535	2,2'-Bioxirane	500
111444	Bis(2-chloroethyl) ether	10,000
542881	Bis(chloromethyl) ether	100

CAS	EHS NAME	TPQ*
534076	Bis(chloromethyl) ketone	10/10,000
4044659	Bitoscanate	500/10,000
10294345	Borane, trichloro-	500
7637072	Borane, trifluoro-	500
10294345	Boron trichloride	500
7637072	Boron trifluoride	500
353424	Boron trifluoride compound with methyl ether (1:1)	1,000
353424	Boron, trifluoro[oxybis(methane)]-, (T-4)-	1,000
28772567	Bromadiolone	100/10,000
7726956	Bromine	500
74839	Bromomethane	1,000
4170303	2-Butenal	1,000
123739	2-Butenal, (e)-	1,000
1306190	Cadmium oxide	100/10,000
2223930	Cadmium stearate	1,000/10,000
7778441	Calcium arsenate	500/10,000
8001352	Campechlor	500/10,000
8001352	Camphene, octachloro-	500/10,000
56257	Cantharidin	100/10,000
51832	Carbachol chloride	500/10,000
26419738	Carbamic acid, methyl-, O-(((2,4-dimethyl-1,3-dithiolan-2-yl)methylene)amino)-	100/10,000
1563662	Carbofuran	10/10,000
75150	Carbon disulfide	10,000
75445	Carbonic dichloride	10
79221	Carbonochloridic acid, methylester	500
108236	Carbonochloridic acid, 1-methylethyl ester	1,000
109615	Carbonochloridic acid, propylester	500
786196	Carbophenothion	500
57749	Chlordane	1,000
470906	Chlorfenvinfos	500
7782505	Chlorine	100
24934916	Chlormephos	500
999815	Chlormequat chloride	100/10,000
79118	Chloroacetic acid	100/10,000
107073	Chloroethanol	500
627112	Chloroethyl chloroformate	1,000
67663	Chloroform	10,000
542881	Chloromethyl ether	100
107302	Chloromethyl methyl ether	100
3691358	Chlorophacinone	100/10,000
542767	3-Chloropropionitrile	1,000
1982474	Chloroxuron	500/10,000
21923239	Chlorthiophos	500
10025737	Chromic chloride	1/10,000
10210681	Cobalt carbonyl	10/10,000
62207765	Cobalt, ((2,2'-(1,2-ethanediy)bis(nitriomethylidene))bis(6-fluorophenylato))(2-)-N,N',O,O')-	100/10,000
64868	Colchicine	10/10,000

October 2006 List

**SARA Title III
EXTREMELY HAZARDOUS SUBSTANCES**

CAS	EHS NAME	TPQ*	CAS	EHS NAME	TPQ*
56724	Coumaphos	100/10,000	534521	4,6-Dinitro-o-cresol	10/10,000
5836293	Coumatetralyl	500/10,000	534521	Dinitrocresol	10/10,000
95487	o-Cresol	1,000/10,000	88857	Dinoseb	100/10,000
535897	Crimidine	100/10,000	1420071	Dinoterb	500/10,000
4170303	Crotonaldehyde	1,000	78342	Dioxathion	500
123739	Crotonaldehyde, (E)-	1,000	82666	Diphacinone	10/10,000
12002038	Cupric acetoarsenite	500/10,000	152169	Diphosphoramidate, octamethyl-	100
506683	Cyanogen bromide	500/10,000	298044	Disulfoton	500
506785	Cyanogen iodide	1,000/10,000	514738	Dithiazanine iodide	500/10,000
2636262	Cyanophos	1,000	541537	Dithiobiuret	100/10,000
675149	Cyanuric fluoride	100	541537	2,4-Dithiobiuret	100/10,000
108918	Cyclohexanamine	10,000	316427	Emetine, dihydrochloride	1/10,000
58899	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1.alpha.,2.alpha.,3.beta.,4.alpha.,5.alpha.,6.beta.)-	1,000/10,000	115297	Endosulfan	10/10,000
66819	Cycloheximide	100/10,000	2778043	Endothion	500/10,000
108918	Cyclohexylamine	10,000	72208	Endrin	500/10,000
17702419	Decaborane(14)	500/10,000	106898	Epichlorohydrin	1,000
8065483	Demeton	500	2104645	EPN	100/10,000
919868	Demeton-S-methyl	500	50146	Ergocalciferol	1,000/10,000
10311849	Dialifor	100/10,000	379793	Ergotamine tartrate	500/10,000
19287457	Diborane	100	107153	1,2-Ethanediamine	10,000
19287457	Diborane(6)	100	79210	Ethaneperoxy acid	500
110576	trans-1,4-Dichloro-2-butene	500	1622328	Ethanesulfonyl chloride, 2-chloro-	500
110576	trans-1,4-Dichlorobutene	500	505602	Ethane, 1,1'-thiobis[2-chloro-	500
111444	Dichloroethyl ether	10,000		Ethanimidothioic acid, N-[[methylamino]carbonyl]	500/10,000
542881	Dichloromethyl ether	100	10140871	Ethanol, 1,2-dichloro-, acetate	1,000
149746	Dichloromethylphenylsilane	1,000	563122	Ethion	1,000
696286	Dichlorophenylarsine	500	13194484	Ethoprop	1,000
62737	Dichlorvos	1,000	13194484	Ethoprophos	1,000
141662	Dicrotophos	100	538078	Ethylbis(2-chloroethyl)amine	500
1464535	Diepoxybutane	500	107120	Ethyl cyanide	500
814493	Diethyl chlorophosphate	500	107153	Ethylenediamine	10,000
297972	O,O-Diethyl O-pyrazinyl phosphorothioate	500	371620	Ethylene fluorohydrin	10
71636	Digitoxin	100/10,000	151564	Ethyleneimine	500
2238075	Diglycidyl ether	1,000	75218	Ethylene oxide	1,000
20830755	Digoxin	10/10,000	542905	Ethylthiocyanate	10,000
115264	Dimefox	500	22224926	Fenamiphos	10/10,000
309002	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1.alpha.,4.alpha.,4a.beta.,5.alpha.,8.alpha.,8a.beta.)-	500/10,000	115902	Fensulfothion	500
60515	Dimethoate	500/10,000	4301502	Fluenetil	100/10,000
2524030	Dimethyl chlorothiophosphate	500	7782414	Fluorine	500
75785	Dimethyldichlorosilane	500	640197	Fluoroacetamide	100/10,000
57147	1,1-Dimethyl hydrazine	1,000	144490	Fluoroacetic acid	10/10,000
57147	Dimethylhydrazine	1,000	62748	Fluoroacetic acid, sodium salt	10/10,000
99989	Dimethyl-p-phenylenediamine	10/10,000	359068	Fluoroacetyl chloride	10
2524030	Dimethyl phosphorochloridothioate	500	51218	Fluorouracil	500/10,000
77781	Dimethyl sulfate	500	944229	Fonofos	500
644644	Dimetilan	500/10,000	50000	Formaldehyde	500
88857	Dinitrobutyl phenol	100/10,000	107164	Formaldehyde cyanohydrin	1,000
			23422539	Formetanate hydrochloride	500/10,000
			2540821	Formothion	100
			17702577	Formparanate	100/10,000
			21548323	Fosthietan	500
			3878191	Fuberidazole	100/10,000

**SARA Title III
EXTREMELY HAZARDOUS SUBSTANCES**

CAS	EHS NAME	TPQ*
110009	Furan	500
13450903	Gallium trichloride	500/10,000
58899	Hexachlorocyclohexane (gamma isomer)	1,000/10,000
77474	Hexachlorocyclopentadiene	100
4835114	Hexamethylenediamine, N,N'-dibutyl-	500
302012	Hydrazine	1,000
57147	Hydrazine, 1,1-dimethyl-	1,000
60344	Hydrazine, methyl-	500
74908	Hydrocyanic acid	100
7664393	Hydrofluoric acid	100
7647010	Hydrogen chloride (gas only)	500
74908	Hydrogen cyanide	100
7664393	Hydrogen fluoride	100
7722841	Hydrogen peroxide (Conc.> 52%)	1,000
7783075	Hydrogen selenide	10
7783064	Hydrogen sulfide	500
123319	Hydroquinone	500/10,000
13463406	Iron carbonyl (Fe(CO) ₅), (TB-5-11)-	100
13463406	Iron, pentacarbonyl-	100
297789	Isobenzan	100/10,000
78820	Isobutyronitrile	1,000
102363	Isocyanic acid, 3,4-dichlorophenyl ester	500/10,000
465736	Isodrin	100/10,000
55914	Isofluorphate	100
4098719	Isophorone diisocyanate	500
108236	Isopropyl chloroformate	1,000
119380	Isopropylmethylpyrazolyl dimethylcarbamate	500
556616	Isothiocyanatomethane	500
78977	Lactonitrile	1,000
21609905	Leptophos	500/10,000
541253	Lewisite	10
58899	Lindane	1,000/10,000
7580678	Lithium hydride	100
109773	Malononitrile	500/10,000
12108133	Manganese, tricarbonyl methylcyclopentadienyl	100
51752	Mechlorethamine	10
950107	Mephosfolan	500
2032657	Mercaptodimethur	500/10,000
1600277	Mercuric acetate	500/10,000
7487947	Mercuric chloride	500/10,000
21908532	Mercuric oxide	500/10,000
10476956	Methacrolein diacetate	1,000
760930	Methacrylic anhydride	500
126987	Methacrylonitrile	500
920467	Methacryloyl chloride	100
30674807	Methacryloyloxyethyl isocyanate	100
10265926	Methamidophos	100/10,000
62759	Methanamine, N-methyl-N-nitroso-	1,000
107302	Methane, chloromethoxy-	100
624839	Methane, isocyanato-	500

CAS	EHS NAME	TPQ*
542881	Methane, oxybis[chloro-	100
594423	Methanesulfonyl chloride, trichloro-	500
558258	Methanesulfonyl fluoride	1,000
509148	Methane, tetranitro-	500
74931	Methanethiol	500
67663	Methane, trichloro-	10,000
57749	4,7-Methanoindan, 1,2,3,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	1,000
950378	Methidathion	500/10,000
2032657	Methiocarb	500/10,000
16752775	Methomyl	500/10,000
151382	Methoxyethylmercuric acetate	500/10,000
74839	Methyl bromide	1,000
80637	Methyl 2-chloroacrylate	500
79221	Methyl chlorocarbonate	500
79221	Methyl chloroformate	500
60344	Methyl hydrazine	500
624839	Methyl isocyanate	500
556616	Methyl isothiocyanate	500
75865	2-Methylactonitrile	1,000
74931	Methyl mercaptan	500
502396	Methylmercuric dicyanamide	500/10,000
298000	Methyl parathion	100/10,000
3735237	Methyl phenkapton	500
676971	Methyl phosphonic dichloride	100
556649	Methyl thiocyanate	10,000
75796	Methyltrichlorosilane	500
78944	Methyl vinyl ketone	10
1129415	Metolcarb	100/10,000
7786347	Mevinphos	500
315184	Mexacarbate	500/10,000
50077	Mitomycin C	500/10,000
6923224	Monocrotophos	10/10,000
2763964	Muscimol	500/10,000
505602	Mustard gas	500
13463393	Nickel carbonyl	1
54115	Nicotine	100
65305	Nicotine sulfate	100/10,000
7697372	Nitric acid	1,000
10102439	Nitric oxide	100
98953	Nitrobenzene	10,000
1122607	Nitrocyclohexane	500
10102440	Nitrogen dioxide	100
10102439	Nitrogen oxide (NO)	100
62759	N-Nitrosodimethylamine	1,000
62759	Nitrosodimethylamine	1,000
991424	Norbormide	100/10,000
0	Organorhodium Complex (PMN-82-147)	10/10,000
630604	Ouabain	100/10,000
23135220	Oxamyl	100/10,000
78717	Oxetane, 3,3-bis(chloromethyl)-	500
75218	Oxirane	1,000

October 2006 List

**SARA Title III
EXTREMELY HAZARDOUS SUBSTANCES**

CAS	EHS NAME	TPQ*
106898	Oxirane, (chloromethyl)-	1,000
75569	Oxirane, methyl-	10,000
2497076	Oxydisulfoton	500
10028156	Ozone	100
1910425	Paraquat dichloride	10/10,000
2074502	Paraquat methosulfate	10/10,000
56382	Parathion	100
298000	Parathion-methyl	100/10,000
12002038	Paris green	500/10,000
19624227	Pentaborane	500
2570265	Pentadecylamine	100/10,000
79210	Peracetic acid	500
594423	Perchloromethyl mercaptan	500
108952	Phenol	500/10,000
64006	Phenol, 3-(1-methylethyl)-, methylcarbamate	500/10,000
4418660	Phenol, 2,2'-thiobis[4-chloro-6-methyl-	100/10,000
58366	Phenoxarsine, 10,10'-oxydi-	500/10,000
696286	Phenyl dichloroarsine	500
59881	Phenylhydrazine hydrochloride	1,000/10,000
62384	Phenylmercuric acetate	500/10,000
62384	Phenylmercury acetate	500/10,000
2097190	Phenylsilatrane	100/10,000
103855	Phenylthiourea	100/10,000
298022	Phorate	10
4104147	Phosacetim	100/10,000
947024	Phosfolan	100/10,000
75445	Phosgene	10
13171216	Phosphamidon	100
7803512	Phosphine	500
2703131	Phosphonothioic acid, methyl-, O-ethyl O-(4-(methylthio)phenyl) ester	500
50782699	Phosphonothioic acid, methyl-, S-(2-(bis(1-methylethyl)amino)ethyl) O-ethyl ester	100
2665307	Phosphonothioic acid, methyl-, O-(4-nitrophenyl) O-phenyl ester	500
62737	Phosphoric acid, 2-dichloroethenyl dimethyl ester	1,000
3254635	Phosphoric acid, dimethyl 4-(methylthio) phenyl ester	500
13194484	Phosphorodithioic acid O-ethyl S,S-dipropyl ester	1,000
56382	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	100
2587908	Phosphorothioic acid, O,O-dimethyl-5-(2-(methylthio)ethyl)ester	500
7719122	Phosphorous trichloride	1,000
7723140	Phosphorus	100
10025873	Phosphorus oxychloride	500
10026138	Phosphorus pentachloride	500
7719122	Phosphorus trichloride	1,000
10025873	Phosphoryl chloride	500
57476	Physostigmine	100/10,000
57647	Physostigmine, salicylate (1:1)	100/10,000

CAS	EHS NAME	TPQ*
124878	Picrotoxin	500/10,000
110894	Piperidine	1,000
23505411	Pirimifos-ethyl	1,000
75741	Plumbane, tetramethyl-	100
10124502	Potassium arsenite	500/10,000
151508	Potassium cyanide	100
506616	Potassium silver cyanide	500
2631370	Promecarb	500/10,000
107120	Propanenitrile	500
78820	Propanenitrile, 2-methyl-	1,000
106967	Propargyl bromide	10
107028	2-Propenal	500
107119	2-Propen-1-amine	500
107131	2-Propenenitrile	10,000
126987	2-Propenenitrile, 2-methyl-	500
107186	2-Propen-1-ol	1,000
814686	2-Propenoyl chloride	100
57578	beta-Propiolactone	500
107120	Propionitrile	500
542767	Propionitrile, 3-chloro-	1,000
70699	Propiophenone, 4'-amino	100/10,000
109615	Propyl chloroformate	500
75558	Propyleneimine	10,000
75569	Propylene oxide	10,000
2275185	Prothoate	100/10,000
129000	Pyrene	1,000/10,000
504245	Pyridine, 4-amino-	500/10,000
140761	Pyridine, 2-methyl-5-vinyl-	500
1124330	Pyridine, 4-nitro-, 1-oxide	500/10,000
53558251	Pyriminil	100/10,000
14167181	Salcomine	500/10,000
107448	Sarin	10
7783008	Selenious acid	1,000/10,000
7791233	Selenium oxychloride	500
563417	Semicarbazide hydrochloride	1,000/10,000
3037727	Silane, (4-aminobutyl)diethoxymethyl-	1,000
75774	Silane, chlorotrimethyl-	1,000
75785	Silane, dichlorodimethyl-	500
75796	Silane, trichloromethyl-	500
7631892	Sodium arsenate	1,000/10,000
7784465	Sodium arsenite	500/10,000
26628228	Sodium azide (Na(N3))	500
124652	Sodium cacodylate	100/10,000
143339	Sodium cyanide (Na(CN))	100
62748	Sodium fluoroacetate	10/10,000
13410010	Sodium selenate	100/10,000
10102188	Sodium selenite	100/10,000
10102202	Sodium tellurite	500/10,000
900958	Stannane, acetoxetriphenyl-	500/10,000
57249	Strychnine	100/10,000
60413	Strychnine, sulfate	100/10,000
3689245	Sulfotep	500
3569571	Sulfoxide, 3-chloropropyl octyl	500

**SARA Title III
EXTREMELY HAZARDOUS SUBSTANCES**

CAS	EHS NAME	TPQ*
7446095	Sulfur dioxide	500
7783600	Sulfur fluoride (SF4), (T-4)-	100
7664939	Sulfuric acid	1,000
7783600	Sulfur tetrafluoride	100
7446119	Sulfur trioxide	100
77816	Tabun	10
7783804	Tellurium hexafluoride	100
107493	TEPP	100
13071799	Terbufos	100
3689245	Tetraethyldithiopyrophosphate	500
78002	Tetraethyl lead	100
107493	Tetraethyl pyrophosphate	100
597648	Tetraethyltin	100
75741	Tetramethyllead	100
509148	Tetranitromethane	500
6533739	Thallium(I) carbonate	100/10,000
7791120	Thallium chloride TlCl	100/10,000
7446186	Thallium(I) sulfate	100/10,000
10031591	Thallium sulfate	100/10,000
6533739	Thallos carbonate	100/10,000
7791120	Thallos chloride	100/10,000
2757188	Thallos malonate	100/10,000
7446186	Thallos sulfate	100/10,000
2231574	Thiocarbazide	1,000/10,000
556649	Thiocyanic acid, methyl ester	10,000
39196184	Thiofanox	100/10,000
74931	Thiomethanol	500
297972	Thionazin	500
108985	Thiophenol	500
79196	Thiosemicarbazide	100/10,000
5344821	Thiourea, (2-chlorophenyl)-	100/10,000
614788	Thiourea, (2-methylphenyl)-	500/10,000

CAS	EHS NAME	TPQ*
86884	Thiourea, 1-naphthalenyl-	500/10,000
7550450	Titanium chloride (TiCl4) (T-4)-	100
7550450	Titanium tetrachloride	100
584849	Toluene-2,4-diisocyanate	500
91087	Toluene-2,6-diisocyanate	100
8001352	Toxaphene	500/10,000
1031476	Triamiphos	500/10,000
24017478	Triazofos	500
76028	Trichloroacetyl chloride	500
1558254	Trichloro(chloromethyl)silane	100
27137855	Trichloro(dichlorophenyl)silane	500
115219	Trichloroethylsilane	500
594423	Trichloromethanesulfonyl chloride	500
327980	Trichloronate	500
98135	Trichlorophenylsilane	500
998301	Triethoxysilane	500
75774	Trimethylchlorosilane	1,000
824113	Trimethylolpropane phosphite	100/10,000
1066451	Trimethyltin chloride	500/10,000
639587	Triphenyltin chloride	500/10,000
555771	Tris(2-chloroethyl)amine	100
2001958	Valinomycin	1,000/10,000
1314621	Vanadium pentoxide	100/10,000
108054	Vinyl acetate	1,000
108054	Vinyl acetate monomer	1,000
81812	Warfarin	500/10,000
129066	Warfarin sodium	100/10,000
28347139	Xylylene dichloride	100/10,000
58270089	Zinc, dichloro(4,4-dimethyl-5((((methylamino)carbonyl)oxy)imino)pentanenitrile)-, (T-4)-	100/10,000
1314847	Zinc phosphide	500

*TPQ = Threshold Planning Quantity in **pounds**.
For some solid chemicals, there are two TPQs
(e.g. 500/10,000). The lower TPQ applies to solids
in powder form, in solution, or in molten form.

October 2006 List