Hazardous Material Procurement Procedures

1.0 Statement

The use of hazardous materials at the University creates a variety of environmental and safety issues. It is the intent of the University to evaluate these issues prior to the procurement of hazardous materials and thereby avoid, to the extent feasible, adverse consequences.

2.0 Purpose/Scope

2.1 Purpose

To establish a hazardous materials procurement procedure that will ensure all purchases are given appropriate safety and environmental considerations.

2.2 Scope

These procedures apply to all employees who purchase chemicals or other hazardous materials that will be used in University business. Also included are hazardous materials which are obtained as free samples or gifts.

3.0 Definitions

Chemical of Interest – A chemical defined by the Department of Homeland Security in 6 CFR part 27 Appendix A, that may present a potential security issue.

Hazardous Material - Any material which contains a substance that is defined as hazardous by the OSHA Hazard Communication Standard.

Select agent, overlap agent, high consequence livestock pathogen or toxin - as defined under Public Laws 107-56 and 107-188.

SDS; **Safety Data Sheet (or Material Safety Data Sheet, MSDS)** - Product safety and handling information supplied by the product manufacturer. It is a requirement of the OSHA Hazard Communication Standard that a copy of a chemical's SDS be made available to any person working with or around a hazardous material.

4.0 References

4.1 41 FR 35050; Aug. 18,1976 (Waste Management Hierarchy)

4.2 CFR Title 29 Part 1910.1200 (Hazard Communication Standard)

4.3 Patriot Act: Public Law 107-56

4.4 Public Health & Bioterrorism Preparedness and Response Act of 2002: Public Law 107-188

5.0 Procedures

5.1 General Procedures

Hazardous materials purchases will be reviewed, before purchase, by "authorized individuals" knowledgeable about relevant environmental and safety issues. These individuals will prevent unnecessary purchases and suggest alternatives to reduce risks, wastes or regulatory burdens.

The office of Environment, Health and Safety will authorize individuals by providing appropriate training.

5.2 Responsibilities of Authorized Individuals

The Authorized Individual will review the purchase to ensure that all safety and environmental considerations have been addressed according to the campus *Chemical Procurement Guidelines.*

If for some reason the purchase is not approved, the concerns of the Authorized Individual will be resolved before purchase.

The Authorized Individual will keep a record of all hazardous materials purchases.

The Authorized Individual will ensure that a SDS is available for every hazardous material purchased.

The Authorized Individual will contact the office of Environment, Health and Safety prior to purchase whenever a purchase is inconsistent with the *Chemical Procurement Guidelines*, or the material or organism may create a new hazard or regulatory burden.

6.0 Gifts and Donations

6.1 Gift and Donation Requirements

All gifts and donations of hazardous materials must be approved in advance by an authorized individual. A SDS or equivalent safety information must accompany the donated hazardous material.

7.0 Authorized Individual Procurement Guidelines

Hazardous material and microorganism purchases should be evaluated for safety and environmental considerations. Some guidelines are presented below for that purpose.

Prevent Generation of Hazardous Waste

Hazardous waste reduction begins at the source of generation. Purchases should be reviewed with the goal of somehow altering the process or materials used in order to reduce the quantity or hazard of the waste produced.

1) Purchase only the quantity of material necessary for the job at hand. Excess material and material that ages past it's shelf life becomes hazardous waste.

2) Determine if a less hazardous material can be substituted for the same job. Suppliers often have suggestions for safer or more environmentally friendly products.

3) Determine if a reusable or recyclable material can be used for the same job.

Chemicals or Agents that are Particularly Dangerous

Several issues must be considered to determine if a chemical or microorganism purchase/use will involve particularly severe hazards. Once again, substitution, reduction of quantity, or possibly elimination of the purchase are options.

1) Manufacturer/supplier information, Safety Data Sheet (SDS) or Material Safety Data Sheet (MSDS), should be consulted to determine if a chemical is carcinogenic and therefore requires special handling. Carcinogenicity must be recorded in your department's chemical inventory.

2) The "Extremely Hazardous Substances" list should be consulted both to determine if a chemical is extremely hazardous and also to check the Reportable Quantity (RQ) and the Threshold Planning Quantity (TPQ).

The RQ is an amount of chemical that, if released to the environment, requires notification of emergency response agencies.

The TPQ is an amount of chemical that, if possessed by the University, requires the development and implementation of a chemical specific risk analysis and risk management plan.

An effort should be made to purchase less than the RQ if possible. In no case should an amount exceeding the TPQ of a listed chemical be purchased without first contacting Environment, Health and Safety.

3) Lists of *Select Agents and Toxins* and *Chemicals of Interest* are defined in antiterrorism regulations; these lists must be consulted to determine if a purchase involves any of these agents, toxins or chemicals. There are potentially significant institutional burdens associated with possession of these hazardous materials – contact the Office of Environment, Health and Safety before purchase if a contemplated purchase is on one of these lists.

Other Regulated Materials

Be vigilant for other types of materials, machinery etc. that may create hazards or University regulatory obligations. Examples include radioactive materials, machines that produce high energy radiation such as X-ray producing machines and lasers, human blood or human blood products, ordinarily benign materials ordered in large quantity, pesticides etc.

Resources for More Information

1) A Safety Data Sheet (or Material Safety Data Sheet) is a document that outlines safety and health information for a particular chemical. SDSs are available in Campus departments and are a resource for familiarization with chemical hazards.

2) The office of Environment, Health and Safety, (x-8847) has primary responsibility for hazardous materials management at the University. The office has resources and references and can be helpful with hazardous materials management issues; please contact that office with any questions or concerns.

(ii) An owner or operator of a facility from which there is a transportation-related release may meet the requirements of this section by providing the information indicated in paragraph (b)(2) to the 911 operator, or in the absence of a 911 emergency telephone number, to the operator. For purposes of this paragraph, a *transportation-related release* means a release during transportation, or storage incident to transportation if the stored substance is moving under active shipping papers and has not reached the ultimate consignee.

[52 FR 13395, Apr. 22, 1987, as amended at 54 FR 22543, May 24, 1989; 55 FR 30188, July 24, 1990; 63 FR 13475, Mar. 19, 1998; 64 FR 13115, Mar. 17, 1999; 71 FR 58533, Oct. 4, 2006]

§ 355.50 Penalties.

(a) *Civil penalties.* Any person who fails to comply with the requirements of § 355.40 shall be subject to civil penalties of up to $25,000 for each violation in accordance with section 325(b)(1) of the Act.

(b) *Civil penalties for continuing violations.* Any person who fails to comply with the requirements of § 355.40 shall be subject to civil penalties of up to $25,000 for each day during which the violation continues, in accordance with section 325(b)(2) of the Act. In the case of a second or subsequent violation, any such person may be subject to civil penalties of up to $75,000 for each day the violation continues, in accordance with section 325(b)(2) of the Act.

(c) *Criminal penalties.* Any person who knowingly and willfully fails to provide notice in accordance with § 355.40 shall, upon conviction, be fined not more than $25,000 or imprisoned for not more than two (2) years, or both (or, in the case of a second or subsequent conviction, shall be fined not more than $50,000 or imprisoned for not more than five (5) years, or both) in accordance with section 325(b)(4) of the Act.

APPENDIX A TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES

[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
75–86–5	Acetone Cyanohydrin		10	1,000
1752–30–3	Acetone Thiosemicarbazide		1,000	1,000/10,000
107–02–8	Acrolein		1	500
79–06–1	Acrylamide	l	5,000	1,000/10,000
107–13–1	Acrylonitrile	l	100	10,000
814–68–6	Acrylyl Chloride	h	100	100
111–69–3	Adiponitrile	l	1,000	1,000
116–06–3	Aldicarb	c	1	100/10,000
309–00–2	Aldrin		1	500/10,000
107–18–6	Allyl Alcohol		100	1,000
107–11–9	Allylamine		500	500
20859–73–8	Aluminum Phosphide	b	100	500
54–62–6	Aminopterin		500	500/10,000
78–53–5	Amiton		500	500
3734–97–2	Amiton Oxalate		100	100/10,000
7664–41–7	Ammonia	l	100	500
300–62–9	Amphetamine		1,000	1,000
62–53–3	Aniline	l	5,000	1,000
88–05–1	Aniline, 2,4,6-Trimethyl-		500	500
7783–70–2	Antimony Pentafluoride		500	500
1397–94–0	Antimycin A	c	1,000	1,000/10,000
86–88–4	ANTU		100	500/10,000
1303–28–2	Arsenic Pentoxide		1	100/10,000
1327–53–3	Arsenous Oxide	h	1	100/10,000
7784–34–1	Arsenous Trichloride		1	500
7784–42–1	Arsine		100	100
2642–71–9	Azinphos-Ethyl		100	100/10,000
86–50–0	Azinphos-Methyl		1	10/10,000
98–87–3	Benzal Chloride		5,000	500
98–16–8	Benzenamine, 3-(Trifluoromethyl)-		500	500
100–14–1	Benzene, 1-(Chloromethyl)-4-Nitro-		500	500/10,000
98–05–5	Benzenearsonic Acid		10	10/10,000
3615–21–2	Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	g	500	500/10,000

[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
98–07–7	Benzotrichloride		10	100
100–44–7	Benzyl Chloride		100	500
140–29–4	Benzyl Cyanide	h	500	500
15271–41–7	Bicyclo[2.2.1]Heptane-2-Carbonitrile, 5-Chloro-6-((((Methylamino)Carbonyl)Oxy)Imino)-, (1s-(1-alpha,2-beta,4-alpha,5-alpha,6E))-.		500	500/10,000
534–07–6	Bis(Chloromethyl) Ketone		10	10/10,000
4044–65–9	Bitoscanate		500	500/10,000
10294–34–5	Boron Trichloride		500	500
7637–07–2	Boron Trifluoride		500	500
353–42–4	Boron Trifluoride Compound With Methyl Ether (1:1)		1,000	1,000
28772–56–7	Bromadiolone		100	100/10,000
7726–95–6	Bromine	l	500	500
1306–19–0	Cadmium Oxide		100	100/10,000
2223–93–0	Cadmium Stearate	c	1,000	1,000/10,000
7778–44–1	Calcium Arsenate		1	500/10,000
8001–35–2	Camphechlor		1	500/10,000
56–25–7	Cantharidin		100	100/10,000
51–83–2	Carbachol Chloride		500	500/10,000
26419–73–8	Carbamic Acid, Methyl-, O-(((2,4-Dimethyl-1, 3-Dithiolan-2-yl)Methylene)Amino)-.		100	100/10,000
1563–66–2	Carbofuran		10	10/10,000
75–15–0	Carbon Disulfide	l	100	10,000
786–19–6	Carbophenothion		500	500
57–74–9	Chlordane		1	1,000
470–90–6	Chlorfenvinfos		500	500
7782–50–5	Chlorine		10	100
24934–91–6	Chlormephos		500	500
999–81–5	Chlormequat Chloride	h	100	100/10,000
79–11–8	Chloroacetic Acid		100	100/10,000
107–07–3	Chloroethanol		500	500
627–11–2	Chloroethyl Chloroformate		1,000	1,000
67–66–3	Chloroform	l	10	10,000
542–88–1	Chloromethyl Ether	h	10	100
107–30–2	Chloromethyl Methyl Ether	c	10	100
3691–35–8	Chlorophacinone		100	100/10,000
1982–47–4	Chloroxuron		500	500/10,000
21923–23–9	Chlorthiophos	h	500	500
10025–73–7	Chromic Chloride		1	1/10,000
62207–76–5	Cobalt, ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidyne)) Bis(6-Fluorophenolato))(2-)-N,N',O,O')-.		100	100/10,000
10210–68–1	Cobalt Carbonyl	h	10	10/10,000
64–86–8	Colchicine	h	10	10/10,000
56–72–4	Coumaphos		10	100/10,000
5836–29–3	Coumatetralyl		500	500/10,000
95–48–7	Cresol, o-		100	1,000/10,000
535–89–7	Crimidine		100	100/10,000
4170–30–3	Crotonaldehyde		100	1,000
123–73–9	Crotonaldehyde, (E)-		100	1,000
506–68–3	Cyanogen Bromide		1,000	500/10,000
506–78–5	Cyanogen Iodide		1,000	1,000/10,000
2636–26–2	Cyanophos		1,000	1,000
675–14–9	Cyanuric Fluoride		100	100
66–81–9	Cycloheximide		100	100/10,000
108–91–8	Cyclohexylamine	l	10,000	10,000
17702–41–9	Decaborane(14)		500	500/10,000
8065–48–3	Demeton		500	500
919–86–8	Demeton-S-Methyl		500	500
10311–84–9	Dialifor		100	100/10,000
19287–45–7	Diborane		100	100
111–44–4	Dichloroethyl ether		10	10,000
149–74–6	Dichloromethylphenylsilane		1,000	1,000
62–73–7	Dichlorvos		10	1,000
141–66–2	Dicrotophos		100	100
1464–53–5	Diepoxybutane		10	500
814–49–3	Diethyl Chlorophosphate	h	500	500
71–63–6	Digitoxin	c	100	100/10,000
2238–07–5	Diglycidyl Ether		1,000	1,000
20830–75–5	Digoxin	h	10	10/10,000
115–26–4	Dimefox		500	500
60–51–5	Dimethoate		10	500/10,000

[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
2524–03–0	Dimethyl Phosphorochloridothioate		500	500
77–78–1	Dimethyl sulfate		100	500
75–78–5	Dimethyldichlorosilane	h	500	500
57–14–7	Dimethylhydrazine		10	1,000
99–98–9	Dimethyl-p-Phenylenediamine		10	10/10,000
644–64–4	Dimetilan		1	500/10,000
534–52–1	Dinitrocresol		10	10/10,000
88–85–7	Dinoseb		1,000	100/10,000
1420–07–1	Dinoterb		500	500/10,000
78–34–2	Dioxathion		500	500
82–66–6	Diphacinone		10	10/10,000
152–16–9	Diphosphoramide, Octamethyl-		100	100
298–04–4	Disulfoton		1	500
514–73–8	Dithiazanine Iodide		500	500/10,000
541–53–7	Dithiobiuret		100	100/10,000
316–42–7	Emetine, Dihydrochloride	h	1	1/10,000
115–29–7	Endosulfan		1	10/10,000
2778–04–3	Endothion		500	500/10,000
72–20–8	Endrin		1	500/10,000
106–89–8	Epichlorohydrin	l	100	1,000
2104–64–5	EPN		100	100/10,000
50–14–6	Ergocalciferol	c	1,000	1,000/10,000
379–79–3	Ergotamine Tartrate		500	500/10,000
1622–32–8	Ethanesulfonyl Chloride, 2-Chloro-		500	500
10140–87–1	Ethanol, 1,2-Dichloro-, Acetate		1,000	1,000
563–12–2	Ethion		10	1,000
13194–48–4	Ethoprophos		1,000	1,000
538–07–8	Ethylbis(2-Chloroethyl)Amine	h	500	500
371–62–0	Ethylene Fluorohydrin	c, h	10	10
75–21–8	Ethylene Oxide	l	10	1,000
107–15–3	Ethylenediamine		5,000	10,000
151–56–4	Ethyleneimine		1	500
542–90–5	Ethylthiocyanate		10,000	10,000
22224–92–6	Fenamiphos		10	10/10,000
115–90–2	Fensulfothion	h	500	500
4301–50–2	Fluenetil		100	100/10,000
7782–41–4	Fluorine	k	10	500
640–19–7	Fluoroacetamide	j	100	100/10,000
144–49–0	Fluoroacetic Acid		10	10/10,000
359–06–8	Fluoroacetyl Chloride	c	10	10
51–21–8	Fluorouracil		500	500/10,000
944–22–9	Fonofos		500	500
50–00–0	Formaldehyde	l	100	500
107–16–4	Formaldehyde Cyanohydrin	h	1,000	1,000
23422–53–9	Formetanate Hydrochloride	(b)	100	500/10,000
2540–82–1	Formothion		100	100
23422–53–9	Formetanate Hydrochloride	(b)	100	500/10,000
21548–32–3	Fosthietan		500	500
3878–19–1	Fuberidazole		100	100/10,000
110–00–9	Furan		100	500
13450–90–3	Gallium Trichloride		500	500/10,000
77–47–4	Hexachlorocyclopentadiene	h	10	100
4835–11–4	Hexamethylenediamine, N,N′-Dibutyl-		500	500
302–01–2	Hydrazine		1	1,000
74–90–8	Hydrocyanic Acid		10	100
7647–01–0	Hydrogen Chloride (gas only)	l	5,000	500
7664–39–3	Hydrogen Fluoride		100	100
7722–84–1	Hydrogen Peroxide (Conc > 52%)	l	1,000	1,000
7783–07–5	Hydrogen Selenide		10	10
7783–06–4	Hydrogen Sulfide	l	100	500
123–31–9	Hydroquinone	l	100	500/10,000
13463–40–6	Iron, Pentacarbonyl-		100	100
297–78–9	Isobenzan		100	100/10,000
78–82–0	Isobutyronitrile	h	1,000	1,000
102–36–3	Isocyanic Acid, 3,4-Dichlorophenyl Ester		500	500/10,000
465–73–6	Isodrin		1	100/10,000
55–91–4	Isofluorphate	c	100	100
4098–71–9	Isophorone Diisocyanate		500	500
108–23–6	Isopropyl Chloroformate		1,000	1,000
119–38–0	Isopropylmethyl-pyrazolyl Dimethylcarbamate		100	500
78–97–7	Lactonitrile		1,000	1,000

[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
21609–90–5	Leptophos		500	500/10,000
541–25–3	Lewisite	c, h	10	10
58–89–9	Lindane		1	1,000/10,000
7580–67–8	Lithium Hydride	b	100	100
109–77–3	Malononitrile		1,000	500/10,000
12108–13–3	Manganese, Tricarbonyl Methylcyclopentadienyl	h	100	100
51–75–2	Mechlorethamine	c	10	10
950–10–7	Mephosfolan		500	500
1600–27–7	Mercuric Acetate		500	500/10,000
7487–94–7	Mercuric Chloride		500	500/10,000
21908–53–2	Mercuric Oxide		500	500/10,000
10476–95–6	Methacrolein Diacetate		1,000	1,000
760–93–0	Methacrylic Anhydride		500	500
126–98–7	Methacrylonitrile	h	1,000	500
920–46–7	Methacryloyl Chloride		100	100
30674–80–7	Methacryloyloxyethyl Isocyanate	h	100	100
10265–92–6	Methamidophos		100	100/10,000
558–25–8	Methanesulfonyl Fluoride		1,000	1,000
950–37–8	Methidathion		500	500/10,000
2032–65–7	Methiocarb		10	500/10,000
16752–77–5	Methomyl	h	100	500/10,000
151–38–2	Methoxyethylmercuric Acetate		500	500/10,000
80–63–7	Methyl 2-Chloroacrylate		500	500
74–83–9	Methyl Bromide	l	1,000	1,000
79–22–1	Methyl Chloroformate	h	1,000	500
60–34–4	Methyl Hydrazine		10	500
624–83–9	Methyl Isocyanate		10	500
556–61–6	Methyl Isothiocyanate	b	500	500
74–93–1	Methyl Mercaptan	l	100	500
3735–23–7	Methyl Phenkapton		500	500
676–97–1	Methyl Phosphonic Dichloride	b	100	100
556–64–9	Methyl Thiocyanate		10,000	10,000
78–94–4	Methyl Vinyl Ketone		10	10
502–39–6	Methylmercuric Dicyanamide		500	500/10,000
75–79–6	Methyltrichlorosilane	h	500	500
1129–41–5	Metolcarb		1,000	100/10,000
7786–34–7	Mevinphos		10	500
315–18–4	Mexacarbate		1,000	500/10,000
50–07–7	Mitomycin C		10	500/10,000
6923–22–4	Monocrotophos		10	10/10,000
2763–96–4	Muscimol		1,000	500/10,000
505–60–2	Mustard Gas	h	500	500
13463–39–3	Nickel Carbonyl		10	1
54–11–5	Nicotine	c	100	100
65–30–5	Nicotine Sulfate		100	100/10,000
7697–37–2	Nitric Acid		1,000	1,000
10102–43–9	Nitric Oxide	c	10	100
98–95–3	Nitrobenzene	l	1,000	10,000
1122–60–7	Nitrocyclohexane		500	500
10102–44–0	Nitrogen Dioxide		10	100
62–75–9	Nitrosodimethylamine	h	10	1,000
991–42–4	Norbormide		100	100/10,000
0	Organorhodium Complex (PMN–82–147)		10	10/10,000
630–60–4	Ouabain	c	100	100/10,000
23135–22–0	Oxamyl		100	100/10,000
78–71–7	Oxetane, 3,3-Bis(Chloromethyl)-		500	500
2497–07–6	Oxydisulfoton	h	500	500
10028–15–6	Ozone		100	100
1910–42–5	Paraquat Dichloride		10	10/10,000
2074–50–2	Paraquat Methosulfate		10	10/10,000
56–38–2	Parathion	c	10	100
298–00–0	Parathion-Methyl	c	100	100/10,000
12002–03–8	Paris Green		1	500/10,000
19624–22–7	Pentaborane		500	500
2570–26–5	Pentadecylamine		100	100/10,000
79–21–0	Peracetic Acid		500	500
594–42–3	Perchloromethylmercaptan		100	500
108–95–2	Phenol		1,000	500/10,000
4418–66–0	Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-		100	100/10,000
64–00–6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate		10	500/10,000
58–36–6	Phenoxarsine, 10,10'-Oxydi-		500	500/10,000

[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
696–28–6	Phenyl Dichloroarsine	h	1	500
59–88–1	Phenylhydrazine Hydrochloride		1,000	1,000/10,000
62–38–4	Phenylmercury Acetate		100	500/10,000
2097–19–0	Phenylsilatrane	h	100	100/10,000
103–85–5	Phenylthiourea		100	100/10,000
298–02–2	Phorate		10	10
4104–14–7	Phosacetim		100	100/10,000
947–02–4	Phosfolan		100	100/10,000
75–44–5	Phosgene	l	10	10
13171–21–6	Phosphamidon		100	100
7803–51–2	Phosphine		100	500
2703–13–1	Phosphonothioic Acid, Methyl-, O-Ethyl O-(4-(Methylthio) Phenyl) Ester.		500	500
50782–69–9	Phosphonothioic Acid, Methyl-, S-(2-(Bis(1Methylethyl)Amino)Ethyl) O-Ethyl Ester.		100	100
2665–30–7	Phosphonothioic Acid, Methyl-, O-(4-Nitrophenyl) O-Phenyl Ester		500	500
3254–63–5	Phosphoric Acid, Dimethyl 4-(Methylthio)Phenyl Ester		500	500
2587–90–8	Phosphorothioic Acid, O,O-Dimethyl-S-(2-Methylthio) Ethyl Ester	c, g	500	500
7723–14–0	Phosphorus	b, h	1	100
10025–87–3	Phosphorus Oxychloride		1,000	500
10026–13–8	Phosphorus Pentachloride	b	500	500
7719–12–2	Phosphorus Trichloride		1,000	1,000
57–47–6	Physostigmine		100	100/10,000
57–64–7	Physostigmine, Salicylate (1:1)		100	100/10,000
124–87–8	Picrotoxin		500	500/10,000
110–89–4	Piperidine		1,000	1,000
23505–41–1	Pirimifos-Ethyl		1,000	1,000
10124–50–2	Potassium Arsenite		1	500/10,000
151–50–8	Potassium Cyanide	b	10	100
506–61–6	Potassium Silver Cyanide	b	1	500
2631–37–0	Promecarb	(k)	1,000	500/10,000
106–96–7	Propargyl Bromide		10	10
57–57–8	Propiolactone, Beta-		10	500
107–12–0	Propionitrile		10	500
542–76–7	Propionitrile, 3-Chloro-		1,000	1,000
70–69–9	Propiophenone, 4-Amino-	g	100	100/10,000
109–61–5	Propyl Chloroformate		500	500
75–56–9	Propylene Oxide	l	100	10,000
75–55–8	Propyleneimine		1	10,000
2275–18–5	Prothoate		100	100/10,000
129–00–0	Pyrene	c	5,000	1,000/10,000
140–76–1	Pyridine, 2-Methyl-5-Vinyl-		500	500
504–24–5	Pyridine, 4-Amino-	h	1,000	500/10,000
1124–33–0	Pyridine, 4-Nitro-,l-Oxide		500	500/10,000
53558–25–1	Pyriminil	h	100	100/10,000
14167–18–1	Salcomine		500	500/10,000
107–44–8	Sarin	h	10	10
7783–00–8	Selenious Acid		10	1,000/10,000
7791–23–3	Selenium Oxychloride		500	500
563–41–7	Semicarbazide Hydrochloride		1,000	1,000/10,000
3037–72–7	Silane, (4-Aminobutyl)Diethoxymethyl-		1,000	1,000
7631–89–2	Sodium Arsenate		1	1,000/10,000
7784–46–5	Sodium Arsenite		1	500/10,000
26628–22–8	Sodium Azide ($Na(N_3)$)	b	1,000	500
124–65–2	Sodium Cacodylate		100	100/10,000
143–33–9	Sodium Cyanide (Na(CN))	b	10	100
62–74–8	Sodium Fluoroacetate		10	10/10,000
13410–01–0	Sodium Selenate		100	100/10,000
10102–18–8	Sodium Selenite	h	100	100/10,000
10102–20–2	Sodium Tellurite		500	500/10,000
900–95–8	Stannane, Acetoxytriphenyl-	g	500	500/10,000
57–24–9	Strychnine	c	10	100/10,000
60–41–3	Strychnine Sulfate		10	100/10,000
3689–24–5	Sulfotep		100	500
3569–57–1	Sulfoxide, 3-Chloropropyl Octyl		500	500
7446–09–5	Sulfur Dioxide	1	500	500
7783–60–0	Sulfur Tetrafluoride		100	100
7446–11–9	Sulfur Trioxide	b	100	100
7664–93–9	Sulfuric Acid		1,000	1,000
77–81–6	Tabun	c, h	10	10
7783–80–4	Tellurium Hexafluoride	k	100	100

[Alphabetical Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
107–49–3	TEPP		10	100
13071–79–9	Terbufos	h	100	100
78–00–2	Tetraethyllead	c	10	100
597–64–8	Tetraethyltin	c	100	100
75–74–1	Tetramethyllead	c, 1	100	100
509–14–8	Tetranitromethane		10	500
10031–59–1	Thallium Sulfate	h	100	100/10,000
6533–73–9	Thallous Carbonate	c, h	100	100/10,000
7791–12–0	Thallous Chloride	c, h	100	100/10,000
2757–18–8	Thallous Malonate	c, h	100	100/10,000
7446–18–6	Thallous Sulfate		100	100/10,000
2231–57–4	Thiocarbazide		1,000	1,000/10,000
39196–18–4	Thiofanox		100	100/10,000
297–97–2	Thionazin		100	500
108–98–5	Thiophenol		100	500
79–19–6	Thiosemicarbazide		100	100/10,000
5344–82–1	Thiourea, (2-Chlorophenyl)-		100	100/10,000
614–78–8	Thiourea, (2-Methylphenyl)-		500	500/10,000
7550–45–0	Titanium Tetrachloride		1,000	100
584–84–9	Toluene 2,4-Diisocyanate		100	500
91–08–7	Toluene 2,6-Diisocyanate		100	100
110–57–6	Trans-1,4-Dichlorobutene		500	500
1031–47–6	Triamiphos		500	500/10,000
24017–47–8	Triazofos		500	500
76–02–8	Trichloroacetyl Chloride		500	500
115–21–9	Trichloroethylsilane	h	500	500
327–98–0	Trichloronate	k	500	500
98–13–5	Trichlorophenylsilane	h	500	500
1558–25–4	Trichloro(Chloromethyl)Silane		100	100
27137–85–5	Trichloro(Dichlorophenyl) Silane		500	500
998–30–1	Triethoxysilane		500	500
75–77–4	Trimethylchlorosilane		1,000	1,000
824–11–3	Trimethylolpropane Phosphite	h	100	100/10,000
1066–45–1	Trimethyltin Chloride		500	500/10,000
639–58–7	Triphenyltin Chloride		500	500/10,000
555–77–1	Tris(2-Chloroethyl)Amine	h	100	100
2001–95–8	Valinomycin	c	1,000	1,000/10,000
1314–62–1	Vanadium Pentoxide		1,000	100/10,000
108–05–4	Vinyl Acetate Monomer	1	5,000	1,000
81–81–2	Warfarin		100	500/10,000
129–06–6	Warfarin Sodium	h	100	100/10,000
28347–13–9	Xylylene Dichloride		100	100/10,000
58270–08–9	Zinc, Dichloro(4,4-Dimethyl-5{{{(Methylamino)Carbonyl) Oxy}Imino}Pentanenitrile)-, (T-4)-.		100	100/10,000
1314–84–7	Zinc Phosphide	b	100	500

* Only the statutory or final RQ is shown. For more information, see 40 CFR table 302.4.

NOTES:

a This chemical does not meet acute toxicity criteria. Its TPQ is set at 10,000 pounds.

b This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, nonsolution form.

c The calculated TPQ changed after technical review as described in the technical support document.

d Indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or other toxicity is completed.

e Statutory reportable quantity for purposes of notification under SARA sect 304(a)(2).

f [Reserved]

g New chemicals added that were not part of the original list of 402 substances.

h Revised TPQ based on new or re-evaluated toxicity data.

j TPQ is revised to its calculated value and does not change due to technical review as in proposed rule.

k The TPQ was revised after proposal due to calculation error.

l Chemicals on the original list that do not meet toxicity criteria but because of their high production volume and recognized toxicity are considered chemicals of concern ("Other chemicals").

[61 FR 20479, May 7, 1996, as amended at 68 FR 52984, Sept. 8, 2003; 69 FR 68815, Nov. 26, 2004; 71 FR 47120, Aug. 16, 2006; 71 FR 53334, Sept. 11, 2006]

List of Extremely Hazardous Substances and Thier Threshold Planning Quantities

APPENDIX B TO PART 355—THE LIST OF EXTREMELY HAZARDOUS SUBSTANCES AND THEIR THRESHOLD PLANNING QUANTITIES

[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
0	Organorhodium Complex (PMN–82–147)		10	10/10,000
50–00–0	Formaldehyde	l	100	500
50–07–7	Mitomycin C		10	500/10,000
50–14–6	Ergocalciferol	c	1,000	1,000/10,000
51–21–8	Fluorouracil		500	500/10,000
51–75–2	Mechlorethaminec	c	10	10
51–83–2	Carbachol Chloride		500	500/10,000
54–11–5	Nicotine	c	100	100
54–62–6	Aminopterin		500	500/10,000
55–91–4	Isofluorphate	c	100	100
56–25–7	Cantharidin		100	100/10,000
56–38–2	Parathion	c	10	100
56–72–4	Coumaphos		10	100/10,000
57–14–7	Dimethylhydrazine		10	1,000
57–24–9	Strychnine	c	10	100/10,000
57–47–6	Physostigmine		100	100/10,000
57–57–8	Propiolactone, Beta-		10	500
57–64–7	Physostigmine, Salicylate (1:1)		100	100/10,000
57–74–9	Chlordane		1	1,000
58–36–6	Phenoxarsine, 10,10'-Oxydi-		500	500/10,000
58–89–9	Lindane		1	1,000/10,000
59–88–1	Phenylhydrazine Hydrochloride		1,000	1,000/10,000
60–34–4	Methyl Hydrazine		10	500
60–41–3	Strychnine sulfate		10	100/10,000
60–51–5	Dimethoate		10	500/10,000
62–38–4	Phenylmercury Acetate		100	500/10,000
62–53–3	Aniline	l	5,000	1,000
62–73–7	Dichlorvos		10	1,000
62–74–8	Sodium Fluoroacetate		10	10/10,000
62–75–9	Nitrosodimethylamine	h	10	1,000
64–00–6	Phenol, 3-(1-Methylethyl)-, Methylcarbamate		10	500/10,000
64–86–8	Colchicine	h	10	10/10,000
65–30–5	Nicotine sulfate		100	100/10,000
66–81–9	Cycloheximide		100	100/10,000
67–66–3	Chloroform	l	10	10,000
70–69–9	Propiophenone, 4-Amino-	g	100	100/10,000
71–63–6	Digitoxin	c	100	100/10,000
72–20–8	Endrin		1	500/10,000
74–83–9	Methyl Bromide	l	1,000	1,000
74–90–8	Hydrocyanic Acid		10	100
74–93–1	Methyl Mercaptan	l	100	500
75–15–0	Carbon Disulfide	l	100	10,000
75–21–8	Ethylene Oxide	l	10	1,000
75–44–5	Phosgene	l	10	10
75–55–8	Propyleneimine		1	10,000
75–56–9	Propylene Oxide	l	100	10,000
75–74–1	Tetramethyllead	c, l	100	100
75–77–4	Trimethylchlorosilane		1,000	1,000
75–78–5	Dimethyldichlorosilane	h	500	500
75–79–6	Methyltrichlorosilane	h	500	500
75–86–5	Acetone Cyanohydrin		10	1,000
76–02–8	Trichloroacetyl Chloride		500	500
77–47–4	Hexachlorocyclopentadiene	h	10	100
77–78–1	Dimethyl Sulfate		100	500
77–81–6	Tabun	c, h	10	10
78–00–2	Tetraethyllead	c	10	100
78–34–2	Dioxathion		500	500
78–53–5	Amiton		500	500
78–71–7	Oxetane, 3,3-Bis(Chloromethyl)-		500	500
78–82–0	Isobutyronitrile	h	1,000	1,000
78–94–4	Methyl Vinyl Ketone		10	10
78–97–7	Lactonitrile		1,000	1,000
79–06–1	Acrylamide	l	5,000	1,000/10,000
79–11–8	Chloroacetic Acid		100	100/10,000
79–19–6	Thiosemicarbazide		100	100/10,000
79–21–0	Peracetic Acid		500	500
79–22–1	Methyl Chloroformate	h	1,000	500
80–63–7	Methyl 2-Chloroacrylate		500	500

[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity * (pounds)	Threshold planning quantity (pounds)
81–81–2	Warfarin		100	500/10,000
82–66–6	Diphacinone		10	10/10,000
86–50–0	Azinphos-Methyl		1	10/10,000
86–88–4	ANTU		100	500/10,000
88–05–1	Aniline, 2,4,6-Trimethyl-		500	500
88–85–7	Dinoseb		1,000	100/10,000
91–08–7	Toluene 2,6-Diisocyanate		100	100
95–48–7	Cresol, o-		100	1,000/10,000
98–05–5	Benzenearsonic Acid		10	10/10,000
98–07–7	Benzotrichloride		10	100
98–13–5	Trichlorophenylsilane	h	500	500
98–16–8	Benzenamine, 3-(Trifluoromethyl)-		500	500
98–87–3	Benzal Chloride		5,000	500
98–95–3	Nitrobenzene	l	1,000	10,000
99–98–9	Dimethyl-p-Phenylenediamine		10	10/10,000
100–14–1	Benzene, 1-(Chloromethyl)-4-Nitro-		500	500/10,000
100–44–7	Benzyl Chloride		100	500
102–36–3	Isocyanic Acid, 3,4-Dichlorophenyl Ester		500	500/10,000
103–85–5	Phenylthiourea		100	100/10,000
106–89–8	Epichlorohydrin	l	100	1,000
106–96–7	Propargyl Bromide		10	10
107–02–8	Acrolein		1	500
107–07–3	Chloroethanol		500	500
107–11–9	Allylamine		500	500
107–12–0	Propionitrile		10	500
107–13–1	Acrylonitrile	l	100	10,000
107–15–3	Ethylenediamine		5,000	10,000
107–16–4	Formaldehyde Cyanohydrin	h	1,000	1,000
107–18–6	Allyl Alcohol		100	1,000
107–30–2	Chloromethyl Methyl Ether	c	10	100
107–44–8	Sarin	h	10	10
107–49–3	TEPP		10	100
108–05–4	Vinyl Acetate Monomer	l	5,000	1,000
108–23–6	Isopropyl Chloroformate		1,000	1,000
108–91–8	Cyclohexylamine	l	10,000	10,000
108–95–2	Phenol		1,000	500/10,000
108–98–5	Thiophenol		100	500
109–61–5	Propyl Chloroformate		500	500
109–77–3	Malononitrile		1,000	500/10,000
110–00–9	Furan		100	500
110–57–6	Trans-1,4-Dichlorobutene		500	500
110–89–4	Piperidine		1,000	1,000
111–44–4	Dichloroethyl Ether		10	10,000
111–69–3	Adiponitrile	l	1,000	1,000
115–21–9	Trichloroethylsilane	h	500	500
115–26–4	Dimefox		500	500
115–29–7	Endosulfan		1	10/10,000
115–90–2	Fensulfothion	h	500	500
116–06–3	Aldicarb	c	1	100/10,000
119–38–0	Isopropylmethyl-pyrazolyl Dimethylcarbamate		100	500
123–31–9	Hydroquinone	l	100	500/10,000
123–73–9	Crotonaldehyde, (E)-		100	1,000
124–65–2	Sodium Cacodylate		100	100/10,000
124–87–8	Picrotoxin		500	500/10,000
126–98–7	Methacrylonitrile	h	1,000	500
129–00–0	Pyrene	c	5,000	1,000/10,000
129–06–6	Warfarin Sodium	h	100	100/10,000
140–29–4	Benzyl Cyanide	h	500	500
140–76–1	Pyridine, 2-Methyl-5-Vinyl-		500	500
141–66–2	Dicrotophos		100	100
143–33–9	Sodium Cyanide (Na(CN))	b	10	100
144–49–0	Fluoroacetic Acid		10	10/10,000
149–74–6	Dichloromethylphenylsilane		1,000	1,000
151–38–2	Methoxyethylmercuric Acetate		500	500/10,000
151–50–8	Potassium Cyanide	b	10	100
151–56–4	Ethyleneimine		1	500
152–16–9	Diphosphoramide, Octamethyl-		100	100
297–78–9	Isobenzan		100	100/10,000
297–97–2	Thionazin		100	500
298–00–0	Parathion-Methyl	c	100	100/10,000
298–02–2	Phorate		10	10

[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
298–04–4	Disulfoton		1	500
300–62–9	Amphetamine		1,000	1,000
302–01–2	Hydrazine		1	1,000
309–00–2	Aldrin		1	500/10,000
315–18–4	Mexacarbate		1,000	500/10,000
316–42–7	Emetine, Dihydrochloride	h	1	1/10,000
327–98–0	Trichloronate	k	500	500
353–42–4	Boron Trifluoride Compound With Methyl Ether (1:1)		1,000	1,000
359–06–8	Fluoroacetyl Chloride	c	10	10
371–62–0	Ethylene Fluorohydrin	c, h	10	10
379–79–3	Ergotamine Tartrate		500	500/10,000
465–73–6	Isodrin		1	100/10,000
470–90–6	Chlorfenvinfos		500	500
502–39–6	Methylmercuric Dicyanamide		500	500/10,000
504–24–5	Pyridine, 4-Amino-	h	1,000	500/10,000
505–60–2	Mustard Gas	h	500	500
506–61–6	Potassium Silver Cyanide	b	1	500
506–68–3	Cyanogen Bromide		1,000	500/10,000
506–78–5	Cyanogen Iodide		1,000	1,000/10,000
509–14–8	Tetranitromethane		10	500
514–73–8	Dithiazanine Iodide		500	500/10,000
534–07–6	Bis(Chloromethyl) Ketone		10	10/10,000
534–52–1	Dinitrocresol		10	10/10,000
535–89–7	Crimidine		100	100/10,000
538–07–8	Ethylbis(2-Chloroethyl)Amine	h	500	500
541–25–3	Lewisite	c, h	10	10
541–53–7	Dithiobiuret		100	100/10,000
542–76–7	Propionitrile, 3-Chloro-		1,000	1,000
542–88–1	Chloromethyl Ether	h	10	100
542–90–5	Ethylthiocyanate		10,000	10,000
555–77–1	Tris(2-Chloroethyl)Amine	h	100	100
556–61–6	Methyl Isothiocyanate	b	500	500
556–64–9	Methyl Thiocyanate		10,000	10,000
558–25–8	Methanesulfonyl Fluoride		1,000	1,000
563–12–2	Ethion		10	1,000
563–41–7	Semicarbazide Hydrochloride		1,000	1,000/10,000
584–84–9	Toluene 2,4-Diisocyanate		100	500
594–42–3	Perchloromethylmercaptan		100	500
597–64–8	Tetraethyltin	c	100	100
614–78–8	Thiourea, (2-Methylphenyl)-		500	500/10,000
624–83–9	Methyl Isocyanate		10	500
627–11–2	Chloroethyl Chloroformate		1,000	1,000
630–60–4	Ouabain	c	100	100/10,000
639–58–7	Triphenyltin Chloride		500	500/10,000
640–19–7	Fluoroacetamide	j	100	100/10,000
644–64–4	Dimetilan		1	500/10,000
675–14–9	Cyanuric Fluoride		100	100
676–97–1	Methyl Phosphonic Dichloride	b	100	100
696–28–6	Phenyl Dichloroarsine	h	1	500
760–93–0	Methacrylic Anhydride		500	500
786–19–6	Carbophenothion		500	500
814–49–3	Diethyl Chlorophosphate	h	500	500
814–68–6	Acrylyl Chloride	h	100	100
824–11–3	Trimethylolpropane Phosphite	h	100	100/10,000
900–95–8	Stannane, Acetoxytriphenyl-	g	500	500/10,000
919–86–8	Demeton-S-Methyl		500	500
920–46–7	Methacryloyl Chloride		100	100
944–22–9	Fonofos		500	500
947–02–4	Phosfolan		100	100/10,000
950–10–7	Mephosfolan		500	500
950–37–8	Methidathion		500	500/10,000
991–42–4	Norbormide		100	100/10,000
998–30–1	Triethoxysilane		500	500
999–81–5	Chlormequat Chloride	h	100	100/10,000
1031–47–6	Triamiphos		500	500/10,000
1066–45–1	Trimethyltin Chloride		500	500/10,000
1122–60–7	Nitrocyclohexane		500	500
1124–33–0	Pyridine, 4-Nitro-,1-Oxide		500	500/10,000
1129–41–5	Metolcarb		1,000	100/10,000
1303–28–2	Arsenic Pentoxide		1	100/10,000
1306–19–0	Cadmium Oxide		100	100/10,000

[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
1314–62–1	Vanadium Pentoxide		1,000	100/10,000
1314–84–7	Zinc Phosphide	b	100	500
1327–53–3	Arsenous Oxide	h	1	100/10,000
1397–94–0	Antimycin A	c	1,000	1,000/10,000
1420–07–1	Dinoterb		500	500/10,000
1464–53–5	Diepoxybutane		10	500
1558–25–4	Trichloro(Chloromethyl)Silane		100	100
1563–66–2	Carbofuran		10	10/10,000
1600–27–7	Mercuric Acetate		500	500/10,000
1622–32–8	Ethanesulfonyl Chloride, 2-Chloro-		500	500
1752–30–3	Acetone Thiosemicarbazide		1,000	1,000/10,000
1910–42–5	Paraquat Dichloride		10	10/10,000
1982–47–4	Chloroxuron		500	500/10,000
2001–95–8	Valinomycin	c	1,000	1,000/10,000
2032–65–7	Methiocarb		10	500/10,000
2074–50–2	Paraquat Methosulfate		10	10/10,000
2097–19–0	Phenylsilatrane	h	100	100/10,000
2104–64–5	EPN		100	100/10,000
2223–93–0	Cadmium Stearate	c	1,000	1,000/10,000
2231–57–4	Thiocarbazide		1,000	1,000/10,000
2238–07–5	Diglycidyl Ether		1,000	1,000
2275–18–5	Prothoate		100	100/10,000
2497–07–6	Oxydisulfoton	h	500	500
2524–03–0	Dimethyl Phosphorochloridothioate		500	500
2540–82–1	Formothion		100	100
2570–26–5	Pentadecylamine		100	100/10,000
2587–90–8	Phosphorothioic Acid, O,O-Dimethyl-S-(2-Methylthio) Ethyl Ester	c, g	500	500
2631–37–0	Promecarb	(b)	1,000	500/10,000
2636–26–2	Cyanophos		1,000	1,000
2642–71–9	Azinphos-Ethyl		100	100/10,000
2665–30–7	Phosphonothioic Acid, Methyl-, O-(4-Nitrophenyl) O-Phenyl Ester		500	500
2703–13–1	Phosphonothioic Acid, Methyl-, O-Ethyl O-(4-(Methylthio)Phenyl) Ester		500	500
2757–18–8	Thallous Malonate	c, h	100	100/10,000
2763–96–4	Muscimol		1,000	500/10,000
2778–04–3	Endothion		500	500/10,000
3037–72–7	Silane, (4-Aminobutyl)Diethoxymethyl-		1,000	1,000
3254–63–5	Phosphoric Acid, Dimethyl 4-(Methylthio)Phenyl Ester		500	500
3569–57–1	Sulfoxide, 3-Chloropropyl Octyl		500	500
3615–21–2	Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	g	500	500/10,000
3689–24–5	Sulfotep		100	500
3691–35–8	Chlorophacinone		100	100/10,000
3734–97–2	Amiton Oxalate		100	100/10,000
3735–23–7	Methyl Phenkapton		500	500
3878–19–1	Fuberidazole		100	100/10,000
4044–65–9	Bitoscanate		500	500/10,000
4098–71–9	Isophorone Diisocyanate		500	500
4104–14–7	Phosacetim		100	100/10,000
4170–30–3	Crotonaldehyde		100	1,000
4301–50–2	Fluenetil		100	100/10,000
4418–66–0	Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-		100	100/10,000
4835–11–4	Hexamethylenediamine, N,N'-Dibutyl-		500	500
5344–82–1	Thiourea, (2-Chlorophenyl)-		100	100/10,000
5836–29–3	Coumatetralyl		500	500/10,000
6533–73–9	Thallous Carbonate	c, h	100	100/10,000
6923–22–4	Monocrotophos		10	10/10,000
7446–09–5	Sulfur Dioxide	l	500	500
7446–11–9	Sulfur Trioxide	b	100	100
7446–18–6	Thallous Sulfate		100	100/10,000
7487–94–7	Mercuric Chloride		500	500/10,000
7550–45–0	Titanium Tetrachloride		1,000	100
7580–67–8	Lithium Hydride	b	100	100
7631–89–2	Sodium Arsenate		1	1,000/10,000
7637–07–2	Boron Trifluoride		500	500
7647–01–0	Hydrogen Chloride (gas only)	l	5,000	500
7664–39–3	Hydrogen Fluoride		100	100
7664–41–7	Ammonia	l	100	500
7664–93–9	Sulfuric Acid		1,000	1,000
7697–37–2	Nitric Acid		1,000	1,000
7719–12–2	Phosphorus Trichloride		1,000	1,000
7722–84–1	Hydrogen Peroxide (Conc > 52%)	l	1,000	1,000
7723–14–0	Phosphorus	b, h	1	100

[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
7726–95–6	Bromine	l	500	500
7778–44–1	Calcium Arsenate		1	500/10,000
7782–41–4	Fluorine	k	10	500
7782–50–5	Chlorine		10	100
7783–00–8	Selenious Acid		10	1,000/10,000
7783–06–4	Hydrogen Sulfide	l	100	500
7783–07–5	Hydrogen Selenide		10	10
7783–60–0	Sulfur Tetrafluoride		100	100
7783–70–2	Antimony Pentafluoride		500	500
7783–80–4	Tellurium Hexafluoride	k	100	100
7784–34–1	Arsenous Trichloride		1	500
7784–42–1	Arsine		100	100
7784–46–5	Sodium Arsenite		1	500/10,000
7786–34–7	Mevinphos		10	500
7791–12–0	Thallous Chloride	c, h	100	100/10,000
7791–23–3	Selenium Oxychloride		500	500
7803–51–2	Phosphine		100	500
8001–35–2	Camphechlor		1	500/10,000
8065–48–3	Demeton		500	500
10025–73–7	Chromic Chloride		1	1/10,000
10025–87–3	Phosphorus Oxychloride		1,000	500
10026–13–8	Phosphorus Pentachloride	b	500	500
10028–15–6	Ozone		100	100
10031–59–1	Thallium Sulfate	h	100	100/10,000
10102–18–8	Sodium Selenite	h	100	100/10,000
10102–20–2	Sodium Tellurite		500	500/10,000
10102–43–9	Nitric Oxide	c	10	100
10102–44–0	Nitrogen Dioxide		10	100
10124–50–2	Potassium Arsenite		1	500/10,000
10140–87–1	Ethanol, 1,2-Dichloro-, Acetate		1,000	1,000
10210–68–1	Cobalt Carbonyl	h	10	10/10,000
10265–92–6	Methamidophos		100	100/10,000
10294–34–5	Boron Trichloride		500	500
10311–84–9	Dialifor		100	100/10,000
10476–95–6	Methacrolein Diacetate		1,000	1,000
12002–03–8	Paris Green		1	500/10,000
12108–13–3	Manganese, Tricarbonyl Methylcyclopentadienyl	h	100	100
13071–79–9	Terbufosh	h	100	100
13171–21–6	Phosphamidon		100	100
13194–48–4	Ethoprophos		1,000	1,000
13410–01–0	Sodium Selenate		100	100/10,000
13450–90–3	Gallium Trichloride		500	500/10,000
13463–39–3	Nickel Carbonyl		10	1
13463–40–6	Iron, Pentacarbonyl-		100	100
14167–18–1	Salcomine		500	500/10,000
15271–41–7	Bicyclo[2.2.1]Heptane-2-Carbonitrile, 5-Chloro-6-((((Methylamino)Carbonyl)Oxy)Imino)-, (1s-(1-alpha,2-beta,4-alpha,5-alpha,6E))-		500	500/10,000
16752–77–5	Methomyl	h	100	500/10,000
17702–41–9	Decaborane(14)		500	500/10,000
17702–57–7	Formparanate		100	100/10,000
19287–45–7	Diborane		100	100
19624–22–7	Pentaborane		500	500
20830–75–5	Digoxin	h	10	10/10,000
20859–73–8	Aluminum Phosphide	b	100	500
21548–32–3	Fosthietan		500	500
21609–90–5	Leptophos		500	500/10,000
21908–53–2	Mercuric Oxide		500	500/10,000
21923–23–9	Chlorthiophos	h	500	500
22224–92–6	Fenamiphos		10	10/10,000
23135–22–0	Oxamyl		100	100/10,000
23422–53–9	Formetanate Hydrochloride	(h)	100	500/10,000
23505–41–1	Pirimifos-Ethyl		1,000	1,000
24017–47–8	Triazofos		500	500
24934–91–6	Chlormephos		500	500
26419–73–8	Carbamic Acid, Methyl-, O-(((2,4-Dimethyl-1, 3-Dithiolan-2-yl)Methylene)Amino)-		100	100/10,000
26628–22–8	Sodium Azide ($Na(N_3)$)	b	1,000	500
27137–85–5	Trichloro(Dichlorophenyl)Silane		500	500
28347–13–9	Xylylene Dichloride		100	100/10,000
28772–56–7	Bromadiolone		100	100/10,000

[CAS Number Order]

CAS No.	Chemical name	Notes	Reportable quantity* (pounds)	Threshold planning quantity (pounds)
30674–80–7	Methacryloyloxyethyl Isocyanateh		100	100
39196–18–4	Thiofanox		100	100/10,000
50782–69–9	Phosphonothioic Acid, Methyl-, S-(2-(Bis(1-Methylethyl)Amino)Ethyl) O-Ethyl Ester.		100	100
53558–25–1	Pyriminil	h	100	100/10,000
58270–08–9	Zinc, Dichloro(4,4-Dimethyl-5((((Methylamino) Carbonyl)Oxy)Imino)Pentanenitrile)-, (T-4)-.		100	100/10,000
62207–76–5	Cobalt, ((2,2'-(1,2-Ethanediylbis (Nitrilomethylidyne)) Bis(6-Fluorophenolato)) (2-)-N,N',O,O')-.		100	100/10,000

*Only the statutory or final RQ is shown. For more information, *see* 40 CFR table 302.4.

NOTES:

a. This chemical does not meet acute toxicity criteria. Its TPQ is set at 10,000 pounds.
b. This material is a reactive solid. The TPQ does not default to 10,000 pounds for non-powder, non-molten, non-solution form.
c. The calculated TPQ changed after technical review as described in the technical support document.
d. Indicates that the RQ is subject to change when the assessment of potential carcinogenicity and/or other toxicity is completed.
e. Statutory reportable quantity for purposes of notification under SARA sect 304(a)(2).
f. [Reserved]
g. New chemicals added that were not part of the original list of 402 substances.
h. Revised TPQ based on new or re-evaluated toxicity data.
j. TPQ is revised to its calculated value and does not change due to technical review as in proposed rule.
k. The TPQ was revised after proposal due to calculation error.
l. Chemicals on the original list that do not meet toxicity criteria but because of their high production volume and recognized toxicity are considered chemicals of concern ("Other chemicals").

[61 FR 20484, May 7, 1996, as amended at 68 FR 52984, Sept. 8, 2003; 69 FR 68815, Nov. 26, 2004; 71 FR 47121, Aug. 16, 2006; 71 FR 53335, Sept. 11, 2006]

PART 370—HAZARDOUS CHEMICAL REPORTING: COMMUNITY RIGHT-TO-KNOW

Subpart A—General Provisions

Sec.

Subpart B—Reporting Requirements

Subpart C—Public Access and Availability of Information

Subpart D—Inventory Forms

AUTHORITY: Secs. 311, 312, 324, 325, 328, 329 of Pub. L. 99–499, 100 Stat. 1613, 42 U.S.C. 11011, 11012, 11024, 11025, 11028, 11029.

SOURCE: 52 FR 38364, Oct. 15, 1987, unless otherwise noted.

Subpart A—General Provisions

§ 370.1 Purpose.

These regulations establish reporting requirements which provide the public with important information on the hazardous chemicals in their communities for the purpose of enhancing community awareness of chemical hazards and facilitating development of State and local emergency response plans.

§ 370.2 Definitions.

Chief Executive Officer of the tribe means the person who is recognized by the Bureau of Indian Affairs as the chief elected administrative officer of the tribe.

Commission means the emergency response commission for the State in which the facility is located except where the facility is located in Indian Country, in which case, *commission* means the emergency response commission for the Tribe under whose jurisdiction the facility is located. In absence of an emergency response commission, the Governor and the chief executive officer, respectively, shall be the commission. Where there is a cooperative agreement between a State and

APHIS 301-851-3300 (option 1)

National Select Agent Registry

CDC 404-718-2000

Last Updated: Monday, January 07, 2013

Select Agents and Toxins List

The following biological agents and toxins have been determined to have the potential to pose a severe threat to both human and animal health, to plant health, or to animal and plant products. An attenuated strain of a select agent or an inactive form of a select toxin may be excluded from the requirements of the Select Agent Regulations. The list of excluded agents and toxins can be found at: http://www.selectagents.gov/Select%20Agents%20and%20Toxins%20Exclusions.html.

HHS AND USDA SELECT AGENTS AND TOXINS
7 CFR Part 331, 9 CFR Part 121, and 42 CFR Part 73

HHS SELECT AGENTS AND TOXINS

Abrin
Botulinum neurotoxins*
Botulinum neurotoxin producing species of *Clostridium**
Conotoxins (Short, paralytic alpha conotoxins containing the following amino acid sequence $X_1CCX_2PACGX_3X_4X_5X_6CX_7$)
Coxiella burnetii
Crimean-Congo haemorrhagic fever virus
Diacetoxyscirpenol
Eastern Equine Encephalitis virus[1]
Ebola virus*
*Francisella tularensis**
Lassa fever virus
Lujo virus
Marburg virus*
Monkeypox virus[1]
Reconstructed replication competent forms of the 1918 pandemic influenza virus containing any portion of the coding regions of all eight gene segments (Reconstructed 1918 Influenza virus)
Ricin
Rickettsia prowazekii
SARS-associated coronavirus (SARS-CoV)
Saxitoxin
South American Haemorrhagic Fever viruses:
- Chapare
- Guanarito
- Junin
- Machupo
- Sabia

Staphylococcal enterotoxins A,B,C,D,E subtypes
T-2 toxin
Tetrodotoxin
Tick-borne encephalitis complex (flavi) viruses:
- Far Eastern subtype
- Siberian subtype

Kyasanur Forest disease virus
Omsk hemorrhagic fever virus
Variola major virus (Smallpox virus)*

OVERLAP SELECT AGENTS AND TOXINS

Bacillus anthracis *
Bacillus anthracis Pasteur strain
Brucella abortus
Brucella melitensis
Brucella suis
*Burkholderia mallei**
*Burkholderia pseudomallei**
Hendra virus
Nipah virus
Rift Valley fever virus
Venezuelan equine encephalitis virus[1]

USDA SELECT AGENTS AND TOXINS

African horse sickness virus
African swine fever virus
Avian influenza virus[1]
Classical swine fever virus
Foot-and-mouth disease virus*
Goat pox virus
Lumpy skin disease virus
Mycoplasma capricolum[1]
Mycoplasma mycoides[1]
Newcastle disease virus[1,2]
Peste des petits ruminants virus
Rinderpest virus*
Sheep pox virus
Swine vesicular disease virus

USDA PLANT PROTECTION AND QUARANTINE (PPQ) SELECT AGENTS AND TOXINS

Peronosclerospora philippinensis (Peronosclerospora sacchari)
Phoma glycinicola (formerly Pyrenochaeta glycines)
Ralstonia solanacearum
Rathayibacter toxicus
Sclerophthora rayssiae
Synchytrium endobioticum
Xanthomonas oryzae

Variola minor virus (Alastrim)*
*Yersinia pestis**

*Denotes Tier 1 Agent

[1]Select agents that meet any of the following criteria are excluded from the requirements of this part: Any low pathogenic strains of avian influenza virus, South American genotype of eastern equine encephalitis virus , west African clade of Monkeypox viruses, any strain of Newcastle disease virus which does not meet the criteria for virulent Newcastle disease virus, all subspecies Mycoplasma capricolum except subspecies capripneumoniae (contagious caprine pleuropneumonia), all subspecies Mycoplasma mycoides except subspecies mycoides small colony (Mmm SC) (contagious bovine pleuropneumonia), any subtypes of Venezuelan equine encephalitis virus except for Subtypes IAB or IC, and Vesicular stomatitis virus (exotic): Indiana subtypes VSV-IN2, VSV-IN3, provided that the individual or entity can verify that the agent is within the exclusion category.
[2] A virulent Newcastle disease virus (avian paramyxovirus serotype 1) has an intracerebral pathogenicity index in day-old chicks (Gallus gallus) of 0.7 or greater or has an amino acid sequence at the fusion (F) protein cleavage site that is consistent with virulent strains of Newcastle disease virus. A failure to detect a cleavage site that is consistent with virulent strains does not confirm the absence of a virulent virus.

12/4/2012

Click here for the List of Select Agents and Toxins (revised 12/4/2012) *(PDF 25KB)*

**Website is being revamped based on Revised Select Agent regulations.*

Animal and Plant Health Inspection Service
Agricultural Select Agent Program
4700 River Road Unit 2, Mailstop 22, Cubicle 1A07
Riverdale, MD 20737
FAX: 301-734-3652
E-mail: ASAP@aphis.usda.gov

Centers for Disease Control and Prevention
Division of Select Agents and Toxins
1600 Clifton Road NE, Mailstop A-46
Atlanta, GA 30333
FAX: 404-718-2056
E-mail: lrsat@cdc.gov

APPENDIX A TO PART 27—DHS CHEMICALS OF INTEREST

Appendix A to Part 27. – DHS Chemicals of Interest[1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue							
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Acetaldehyde		75-07-0	1.00	10,000						X					
Acetone cyanohydrin, stabilized		75-86-5					ACG	APA							X
Acetyl bromide		506-96-7					ACG	APA							X
Acetyl chloride		75-36-5					ACG	APA							X
Acetyl iodide		507-02-8					ACG	APA							X
Acetylene	[Ethyne]	74-86-2	1.00	10,000						X					
Acrolein	[2-Propenal] or Acrylaldehyde	107-02-8	1.00	5,000					X						
Acrylonitrile	[2-Propenenitrile]	107-13-1	1.00	10,000						X					
Acrylyl chloride	[2-Propenoyl chloride]	814-68-6	1.00	10,000						X					
Allyl alcohol	[2-Propen-1-ol]	107-18-6	1.00	15,000					X						
Allylamine	[2-Propen-1-amine]	107-11-9	1.00	10,000						X					
Allyltrichlorosilane, stabilized		107-37-9					ACG	APA							X
Aluminum [powder]		7429-90-5			ACG	100								X	
Aluminum bromide, anhydrous		7727-15-3					ACG	APA							X
Aluminum chloride, anhydrous		7446-70-0					ACG	APA							X
Aluminum phosphide		20859-73-8					ACG	APA							X
Ammonia (anhydrous)		7664-41-7	1.00	10,000					X						
Ammonia (conc. 20% or greater)		7664-41-7	20.00	20,000					X						
Ammonium nitrate, [with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance]		6484-52-2	ACG	5,000	ACG	400					X			X	

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Appendix A to Part 27. – DHS Chemicals of Interest [1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue							
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXPLEDP	Sabotage/Contamination
Ammonium nitrate, solid [nitrogen concentration of 23% nitrogen or greater]		6484-52-2			33.00	2000								X	
Ammonium perchlorate		7790-98-9	ACG	5,000	ACG	400					X			X	
Ammonium picrate		131-74-8	ACG	5,000	ACG	400					X			X	
Amyltrichlorosilane		107-72-2					ACG	APA							X
Antimony pentafluoride		7783-70-2					ACG	APA							X
Arsenic trichloride	[Arsenous trichloride]	7784-34-1	1.00	15,000	30.00	2.2			X			X			
Arsine		7784-42-1	1.00	1,000	0.67	15			X				X		
Barium azide		18810-58-7	ACG	5,000	ACG	400					X			X	
1,4-Bis(2-chloroethylthio)-n-butane		142868-93-7			CUM	100g						X			
Bis(2-chloroethylthio)methane		63869-13-6			CUM	100g						X			
Bis(2-chloroethylthiomethyl)ether		63918-90-1			CUM	100g						X			
1,5-Bis(2-chloroethylthio)-n-pentane		142868-94-6			CUM	100g						X			
1,3-Bis(2-chloroethylthio)-n-propane		63905-10-2			CUM	100g						X			
Boron tribromide		10294-33-4			12.67	45	ACG	APA					X		X
Boron trichloride	[Borane, trichloro]	10294-34-5	1.00	5,000	84.70	45			X				X		
Boron trifluoride	[Borane, trifluoro]	7637-07-2	1.00	5,000	26.87	45			X				X		
Boron trifluoride compound with methyl ether (1:1)	[Boron, trifluoro [oxybis (methane)]-T-4-]	353-42-4	1.00	15,000					X						
Bromine		7726-95-6	1.00	10,000					X				X		
Bromine chloride		13863-41-7			9.87	45									
Bromine pentafluoride		7789-30-2					ACG	APA					X		X
Bromine trifluoride		7787-71-5			6.00	45	ACG	APA					X		X
Bromotrifluoroethylene	[Ethene, bromotrifluoro-]	598-73-2	1.00	10,000						X					

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Appendix A to Part 27. -- DHS Chemicals of Interest [1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (In pounds)	Minimum Concentration (%)	Screening Threshold Quantities (In pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IED/P	Sabotage/Contamination
1,3-Butadiene		106-99-0	1.00	10,000					X	X					
Butane		106-97-8	1.00	10,000						X					
Butene		25167-67-3	1.00	10,000						X					
1-Butene		106-98-9	1.00	10,000						X					
2-Butene		107-01-7	1.00	10,000						X					
2-Butene-cis		590-18-1	1.00	10,000						X					
2-Butene-trans	[2-Butene, (E)]	624-64-6	1.00	10,000						X					
Butyltrichlorosilane		7521-80-4					ACG	APA							X
Calcium hydrosulfite	[Calcium dithionite]	10512-36-4					ACG	APA							X
Calcium phosphide		1305-99-3					ACG	APA							X
Carbon disulfide		75-15-0	1.00	20,000					X						
Carbon oxysulfide	[Carbon oxide sulfide (COS); carbonyl sulfide]	463-58-1	1.00	10,000						X					
Carbonyl fluoride		353-50-4			12.00	45							X		
Carbonyl sulfide		463-58-1			56.67	500							X		
Chlorine		7782-50-5	1.00	2,500	9.77	500			X				X		
Chlorine dioxide	[Chlorine oxide, (ClO2)]	10049-04-4	1.00	1,000			ACG	APA	X						X
Chlorine monoxide	[Chlorine oxide]	7791-21-1	1.00	10,000						X					
Chlorine pentafluoride		13637-63-3			4.07	15							X		
Chlorine trifluoride		7790-91-2			9.97	45							X		
Chloroacetyl chloride		79-04-9					ACG	APA							X
2-Chloroethylchloro-methylsulfide		2625-76-5			CUM 100g							X			
Chloroform	[Methane, trichloro-]	67-66-3	1.00	20,000					X						
Chloromethyl ether	[Methane, oxybis(chloro-)]	542-88-1	1.00	1,000					X						
Chloromethyl methyl ether	[Methane, chloromethoxy-]	107-30-2	1.00	5,000					X						
1-Chloropropylene	[1-Propene, 1-chloro-]	590-21-6	1.00	10,000						X					
2-Chloropropylene	[1-Propene, 2-chloro-]	557-98-2	1.00	10,000						X					

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Appendix A to Part 27. -- DHS Chemicals of Interest [1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage		Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Chlorosarin	[o-Isopropyl methylphosphonochloridate]	1445-76-7			CUM	100g						X			
Chlorosoman	[o-Pinacolyl methylphosphonochloridate]	7040-57-5			CUM	100g						X			
Chlorosulfonic acid		7790-94-5					ACG	APA							X
Chromium oxychloride		14977-61-8					ACG	APA							X
Crotonaldehyde	[2-Butenal]	4170-30-3	1.00	10,000						X					
Crotonaldehyde, (E)-	[2-Butenal, (E)-]	123-73-9	1.00	10,000						X					
Cyanogen	[Ethanedinitrile]	460-19-5	1.00	10,000	11.67	45				X			X		
Cyanogen chloride		506-77-4	1.00	10,000	2.67	15			X				X		
Cyclohexylamine	[Cyclohexanamine]	108-91-8	1.00	15,000					X						
Cyclohexyltrichlorosilane		98-12-4	1.00	10,000			ACG	APA							X
Cyclopropane		75-19-4	1.00	10,000						X					
DF	[Methyl phosphonyl difluoride	676-99-3			CUM	100g						X			
Diazodinitrophenol		87-31-0	ACG	5,000	ACG	400					X			X	
Diborane		19287-45-7	1.00	2,500	2.67	15			X				X		
Dichlorosilane	[Silane, dichloro-]	4109-96-0	1.00	10,000	10.47	45				X			X		
N,N-(2-diethylaminoethanethiol		100-38-9			30.00	2.2						X			
Diethyldichlorosilane		1719-53-5					ACG	APA							X
o,o-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate		78-53-5			30.00	2.2						X			
Diethyleneglycol dinitrate		693-21-0	ACG	5,000	ACG	400					X			X	
Diethyl methylphosphonite		15715-41-0			30.00	2.2						X			
N,N-Diethyl phosphoramidic dichloride		1498-54-0			30.00	2.2						X			
N,N-(2-diisopropylamino)ethanethiol	N,N-diisopropyl-(beta)-aminoethane thiol	5842-07-9			30.00	2.2						X			

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Appendix A to Part 27. – DHS Chemicals of Interest [1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue							
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXPLEDP	Sabotage/Contamination
Difluoroethane	[Ethane, 1,1-difluoro-]	75-37-6	1.00	10,000						X					
N,N-Diisopropyl phosphoramidic dichloride		23306-80-1			30.00	2.2						X			
1,1-Dimethylhydrazine	[Hydrazine, 1, 1-dimethyl-]	57-14-7	1.00	10,000						X					
Dimethylamine	[Methanamine, N-methyl-]	124-40-3	1.00	10,000						X					
N,N-(2-dimethylamino)ethanethiol		108-02-1			30.00	2.2						X			
Dimethyldichlorosilane	[Silane, dichlorodimethyl-]	75-78-5	1.00	10,000			ACG	APA		X					X
N,N-Dimethyl phosphoramidic dichloride	[Dimethylphosphoramidic dichloridate]	677-43-0			30.00	2.2						X			
2,2-Dimethylpropane	[Propane, 2,2-dimethyl-]	463-82-1	1.00	10,000						X					
Dingu	[Dinitroglycoluril]	55510-04-8	ACG	5,000	ACG	400					X			X	
Dinitrogen tetroxide		10544-72-6			3.80	15							X		
Dinitrophenol		25550-58-7	ACG	5,000	ACG	400					X			X	
Dinitroresorcinol		519-44-8	ACG	5,000	ACG	400					X			X	
Diphenyldichlorosilane		80-10-4					ACG	APA							X
Dipicryl sulfide		2217-06-3	ACG	5,000	ACG	400					X			X	
Dipicrylamine [or] Hexyl	[Hexanitrodiphenylamine]	131-73-7	ACG	5,000	ACG	400					X			X	
N,N-(2-dipropylamino)ethanethiol		5842-06-8			30.00	2.2						X			
N,N-Dipropyl phosphoramidic dichloride		40881-98-9			30.00	2.2						X			
Dodecyltrichlorosilane		4484-72-4					ACG	APA							X
Epichlorohydrin	[Oxirane, (chloromethyl)-]	106-89-8	1.00	20,000					X						
Ethane		74-84-0	1.00	10,000						X					
Ethyl acetylene	[1-Butyne]	107-00-6	1.00	10,000						X					
Ethyl chloride	[Ethane, chloro-]	75-00-3	1.00	10,000						X					
Ethyl ether	[Ethane, 1,1-oxybis-]	60-29-7	1.00	10,000						X					
Ethyl mercaptan	[Ethanethiol]	75-08-1	1.00	10,000						X					

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Appendix A to Part 27. -- DHS Chemicals of Interest[1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue							
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Ethyl nitrite	[Nitrous acid, ethyl ester]	109-95-5	1.00	10,000						X					
Ethyl phosphonyl difluoride		753-98-0			CUM 100g							X			
Ethylamine	[Ethanamine]	75-04-7	1.00	10,000						X					
Ethyldiethanolamine		139-87-7			80.00	220						X			
Ethylene	[Ethene]	74-85-1	1.00	10,000						X					
Ethylene oxide	[Oxirane]	75-21-8	1.00	10,000						X					
Ethylenediamine	[1,2-Ethanediamine]	107-15-3	1.00	20,000					X						
Ethyleneimine	[Aziridine]	151-56-4	1.00	10,000						X					
Ethylphosphonothioic dichloride		993-43-1			30.00	2.2						X			
Ethyltrichlorosilane		115-21-9					ACG	APA							X
Fluorine		7782-41-4	1.00	1,000	6.17	15			X				X		
Fluorosulfonic acid		7789-21-1					ACG	APA							X
Formaldehyde (solution)		50-00-0	1.00	15,000					X						
Furan		110-00-9	1.00	10,000						X					
Germane		7782-65-2			20.73	45							X		
Germanium tetrafluoride		7783-58-6			2.11	15							X		
Guanyl nitrosaminoguanylidene hydrazine			ACG	5,000	ACG	400					X			X	
Hexaethyl tetraphosphate and compressed gas mixtures		757-58-4			33.37	500							X		
Hexafluoroacetone		684-16-2			15.67	45							X		
Hexanitrostilbene		20062-22-0	ACG	5,000	ACG	400					X			X	
Hexolite	[Hexotol]	121-82-4	ACG	5,000	ACG	400					X			X	
Hexylchlorosilane		928-65-4					ACG	APA							X
HMX	[Cyclotetramethylene-tetranitramine]	2691-41-0	ACG	5,000	ACG	400					X			X	

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Appendix A to Part 27. -- DHS Chemicals of Interest[1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
HN1 (nitrogen mustard-1)	[Bis(2-chloroethyl)ethylamine]	538-07-8			CUM	100g						X			
HN2 (nitrogen mustard-2)	[Bis(2-chloroethyl)methylamine]	51-75-2			CUM	100g						X			
HN3 (nitrogen mustard-3)	[Tris(2-chloroethyl)amine]	555-77-1			CUM	100g						X			
Hydrazine		302-01-2	1.00	10,000					X	X					
Hydrochloric acid (conc. 37% or greater)		7647-01-0	37.00	15,000					X						
Hydrocyanic acid		74-90-8	1.00	2,500					X						
Hydrofluoric acid (conc. 50% or greater)		7664-39-3	50.00	1,000					X						
Hydrogen		1333-74-0	1.00	10,000						X			X		
Hydrogen bromide (anhydrous)		10035-10-6			95.33	500							X		
Hydrogen chloride (anhydrous)		7647-01-0	1.00	5,000	ACG	500			X				X		
Hydrogen cyanide	[Hydrocyanic acid]	74-90-8			4.67	15							X		
Hydrogen fluoride (anhydrous)		7664-39-3	1.00	1,000	42.53	45			X				X		
Hydrogen iodide, anhydrous		10034-85-2			95.33	500							X		
Hydrogen peroxide (concentration of at least 35%)		7722-84-1			35.00	400								X	
Hydrogen selenide		7783-07-5	1.00	10,000	0.07	15				X			X		
Hydrogen sulfide		7783-06-4	1.00	10,000	23.73	45			X				X		
Iodine pentafluoride		7783-66-6					ACG	APA							X
Iron, pentacarbonyl-	[Iron carbonyl (Fe (CO)5), (TB5-11)-]	13463-40-6	1.00	10,000						X					
Isobutane	[Propane, 2-methyl]	75-28-5	1.00	10,000							X				
Isobutyronitrile	[Propanenitrile, 2-methyl-]	78-82-0	1.00	20,000					X						
Isopentane	[Butane, 2-methyl-]	78-78-4	1.00	10,000							X				
Isoprene	[1,3-Butadiene, 2-methyl-]	78-79-5	1.00	10,000							X				

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Appendix A to Part 27. -- DHS Chemicals of Interest[1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue							
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Isopropyl chloride	[Propane, 2-chloro-]	75-29-6	1.00	10,000						X					
Isopropyl chloroformate	[Carbonochloridic acid, 1-methylethyl ester]	108-23-6	1.00	15,000					X						
Isopropylamine	[2-Propanamine]	75-31-0	1.00	10,000						X					
Isopropylphosphonothioic dichloride		1498-80-8			30.00	2.2						X			
Isopropylphosphonyl difluoride		677-42-9			CUM	100g						X			
Lead azide		13424-46-9	ACG	5,000	ACG	400					X				
Lead styphnate	[Lead trinitroresorcinate]	15245-44-0	ACG	5,000	ACG	400					X				
Lewisite 1	[2-Chlorovinyldichloroarsine]	541-25-3			CUM	100g						X			
Lewisite 2	[Bis(2-chlorovinyl)chloroarsine]	40334-69-8			CUM	100g						X			
Lewisite 3	[Tris(2-chlorovinyl)arsine]	40334-70-1			CUM	100g						X			
Lithium amide		7782-89-0					ACG	APA							X
Lithium nitride		26134-62-3					ACG	APA							X
Magnesium (powder)		7439-95-4			ACG	100								X	
Magnesium diamide		7803-54-5					ACG	APA							X
Magnesium phosphide		12057-74-8					ACG	APA							X
MDEA	[Methyldiethanolamine]	105-59-9			80.00	220						X			
Mercury fulminate		628-86-4	ACG	5,000	ACG	400					X			X	
Methacrylonitrile	[2-Propenenitrile, 2-methyl-]	126-98-7	1.00	10,000					X						
Methane		74-82-8	1.00	10,000						X					
2-Methyl-1-butene		563-46-2	1.00	10,000						X					
3-Methyl-1-butene		563-45-1	1.00	10,000						X					
Methyl chloride	[Methane, chloro-]	74-87-3	1.00	10,000						X					
Methyl chloroformate	[Carbonochloridic acid, methyl ester]	79-22-1	1.00	10,000						X					
Methyl ether	[Methane, oxybis-]	115-10-6	1.00	10,000						X					
Methyl formate	[Formic acid Methyl ester]	107-31-3	1.00	10,000						X					

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Appendix A to Part 27. -- DHS Chemicals of Interest [1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue					
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Methyl hydrazine	[Hydrazine, methyl-]	60-34-4	1.00	15,000					X						
Methyl isocyanate	[Methane, isocyanato-]	624-83-9	1.00	10,000					X						
Methyl mercaptan	[Methanethiol]	74-93-1	1.00	10,000	45.00	500				X			X		
Methyl thiocyanate	[Thiocyanic acid, methyl ester]	556-64-9	1.00	20,000					X						
Methylamine	[Methanamine]	74-89-5	1.00	10,000	20.00	45				X			X		
Methyltrichlorosilane		993-00-0					ACG	APA							X
Methyldichlorosilane		75-54-7					ACG	APA							X
Methylphenyldichlorosilane		149-74-6					ACG	APA							X
Methylphosphonothioic dichloride		676-98-2			30.00	2.2						X			
2-Methylpropene	[1-Propene, 2-methyl-]	115-11-7	1.00	10,000						X					
Methyltrichlorosilane	[Silane, trichloromethyl-]	75-79-6	1.00	10,000			ACG	APA		X					X
Sulfur mustard (Mustard gas (H))	[Bis(2-chloroethyl)sulfide]	505-60-2			CUM	100g						X			
O-Mustard (T)	[Bis(2-chloroethyl)thioethyl)ether]	63918-89-8			CUM	100g									
Nickel Carbonyl		13463-39-3	1.00	10,000						X					
Nitric acid		7697-37-2	80.00	15,000	68.00	400			X					X	
Nitric oxide	[Nitrogen oxide (NO)]	10102-43-9	1.00	10,000	3.83	15			X				X		
Nitrobenzene		98-95-3			ACG	100								X	
5-Nitrobenzotriazol		2338-12-7	ACG	5,000	ACG	400					X			X	
Nitrocellulose		9004-70-0	ACG	5,000	ACG	400					X			X	
Nitrogen mustard hydrochloride	[Bis(2-chloroethyl)methylamine hydrochloride]	55-86-7			30.00	2.2						X			
Nitrogen trioxide		10544-73-7			3.83	15							X		
Nitroglycerine		55-63-0	ACG	5,000	ACG	400					X			X	
Nitromannite	[Mannitol hexanitrate, wetted]	15825-70-4	ACG	5,000	ACG	400					X			X	
Nitromethane		75-52-5			ACG	400								X	
Nitrostarch		9056-38-6	ACG	5,000	ACG	400					X			X	
Nitrosyl chloride		2696-92-6			1.17	15							X		

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Appendix A to Part 27. – DHS Chemicals of Interest[1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Nitrotriazolone		932-64-9	ACG	5,000	ACG	400					X			X	
Nonyltrichlorosilane		5283-67-0					ACG	APA							X
Octadecyltrichlorosilane		112-04-9					ACG	APA							X
Octolite		57607-37-1	ACG	5,000	ACG	400					X			X	
Octonal		78413-87-3	ACG	5,000	ACG	400					X			X	
Octyltrichlorosilane		5283-66-9					ACG	APA							X
Oleum (Fuming Sulfuric acid)	[Sulfuric acid, mixture with sulfur trioxide]	8014-95-7	1.00	10,000					X						
Oxygen difluoride		7783-41-7			0.09	15							X		
1,3-Pentadiene		504-60-9	1.00	10,000						X					
Pentane		109-66-0	1.00	10,000						X					
1- Pentene		109-67-1	1.00	10,000						X					
2-Pentene, (E)-		646-04-8	1.00	10,000						X					
2-Pentene, (Z)-		627-20-3	1.00	10,000						X					
Pentolite		8066-33-9	ACG	5,000	ACG	400					X			X	
Peracetic acid	[Ethaneperoxoic acid]	79-21-0	1.00	10,000						X					
Perchloromethylmercaptan	[Methanesulfenyl chloride, trichloro-]	594-42-3	1.00	10,000					X						
Perchloryl fluoride		7616-94-6			25.67	45							X		
PETN	[Pentaerythritol tetranitrate]	78-11-5	ACG	5,000	ACG	400					X			X	
Phenyltrichlorosilane		98-13-5					ACG	APA							X
Phosgene	[Carbonic dichloride] or [carbonyl dichloride]	75-44-5	1.00	500	0.17	15			X				X		
Phosphine		7803-51-2	1.00	10,000	0.67	15					X		X		
Phosphorus		7723-14-0			ACG	400								X	
Phosphorus oxychloride	(Phosphoryl chloride)	10025-87-3	1.00	5,000	80.00	220	ACG	APA	X			X			X
Phosphorus pentabromide		7789-69-7					ACG	APA							X
Phosphorus pentachloride		10026-13-8					ACG	APA							X
Phosphorus pentasulfide		1314-80-3					ACG	APA							X

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Appendix A to Part 27. -- DHS Chemicals of Interest[1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue							
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release -- Toxic	Release -- Flammables	Release -- Explosives	Theft -- CW/CWP	Theft -- WME	Theft -- EXP/IEDP	Sabotage/Contamination
Phosphorus trichloride		7719-12-2	1.00	15,000	3.48	45	ACG	APA	X				X		X
Phorate	[Nitroguanidine]	566-68-7	ACG	5,000	ACG	400					X			X	
Piperidine		110-89-4	1.00	10,000						X					
Potassium chlorate		3811-04-9			ACG	400								X	
Potassium cyanide		151-50-8					ACG	APA							X
Potassium nitrate		7757-79-1			ACG	400								X	
Potassium perchlorate		7778-74-7			ACG	400								X	
Potassium permanganate		7722-64-7			ACG	400								X	
Potassium phosphide		20770-41-6					ACG	APA							X
Propadiene	[1,2-Propadiene]	463-49-0	1.00	10,000						X					
Propane		74-98-6	1.00	60,000						X					
Propanenitrile	[Propanenitrile]	107-12-0	1.00	10,000					X						
Propyl chloroformate	[Carbonochloridic acid, propylester]	109-61-5	1.00	10,000						X					
Propylene	[1-Propene]	115-07-1	1.00	10,000						X					
Propylene oxide	[Oxirane, methyl-]	75-56-9	1.00	10,000						X					
Propyleneimine	[Aziridine, 2-methyl-]	75-55-8	1.00	10,000					X						
Propylphosphonothioic dichloride		2524-01-8			30.00	2.2						X			
Propylphosphonyl difluoride		690-14-2				CUM 100g						X			
Propyltrichlorosilane		141-57-1					ACG	APA							X
Propyne	[1-Propyne]	74-99-7	1.00	10,000						X					
QL	[o-Ethyl-o-2-diisopropylaminoethyl methylphosphonite]	57856-11-8				CUM 100g						X			
RDX	[Cyclotrimethylenetrinitramine]	121-82-4	ACG	5,000	ACG	400					X			X	
RDX and HMX mixtures		121-82-4	ACG	5,000	ACG	400					X			X	
Sarin	[o-isopropyl methylphosphonofluoridate]	107-44-8				CUM 100g						X			
Selenium hexafluoride		7783-79-1			1.67	15							X		

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Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Sesquimustard	[1,2-Bis(2-chloroethylthio)ethane]	3563-36-8			CUM 100g							X			X
Silane		7803-62-5	1.00	10,000						X					
Silicon tetrachloride		10026-04-7					ACG	APA							X
Silicon tetrafluoride		7783-61-1			15.00	45							X		
Sodium azide		26628-22-8			ACG	400								X	
Sodium chlorate		7775-09-9			ACG	400								X	
Sodium cyanide		143-33-9					ACG	APA							X
Sodium hydrosulfite	[Sodium dithionite]	7775-14-6					ACG	APA							X
Sodium nitrate		7631-99-4			ACG	400							X		
Sodium phosphide		12058-85-4					ACG	APA							X
Soman	[o-Pinacolyl methylphosphonofluoridate]	96-64-0			CUM 100g							X			
Stibine		7803-52-3			0.67	15							X		
Strontium phosphide		12504-16-4					ACG	APA							X
Sulfur dioxide (anhydrous)		7446-09-5	1.00	5,000	84.00	500			X				X		
Sulfur tetrafluoride	[Sulfur fluoride (SF4), (T-4)-]	7783-60-0	1.00	2,500	1.33	15				X			X		
Sulfur trioxide		7446-11-9	1.00	10,000						X					
Sulfuryl chloride		7791-25-5					ACG	APA							X
Tabun	[o-Ethyl-N,N-dimethylphosphoramido-cyanidate]	77-81-6			CUM 100g							X			
Tellurium hexafluoride		7783-80-4			0.83	15							X		
Tetrafluoroethylene	[Ethene, tetrafluoro-]	116-14-3	1.00	10,000						X					
Tetramethyllead	[Plumbane, tetramethyl-]	75-74-1	1.00	10,000					X						
Tetramethylsilane	[Silane, tetramethyl-]	75-76-3	1.00	10,000						X					
Tetranitroaniline		53014-37-2	ACG	5,000	ACG	400					X			X	
Tetranitromethane	[Methane, tetranitro-]	509-14-8	1.00	10,000						X					
Tetrazene	[Guanyl nitrosaminoguanyltetrazene]	109-27-3	ACG	5,000	ACG	400					X			X	

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Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
1H-Tetrazole		288-94-8	ACG	5,000	ACG	400					X			X	
Thiodiglycol	[Bis(2-hydroxyethyl)sulfide]	111-48-8			30.00	2.2						X			
Thionyl chloride		7719-09-7					ACG	APA							X
Titanium tetrachloride	[Titanium chloride (TiCl4) (T-4)-]	7550-45-0	1.00	2,500	13.33	45	ACG	APA	X				X		X
TNT	[Trinitrotoluene]	118-96-7	ACG	5,000	ACG	400					X			X	
Torpex	[Hexotonal]	67713-16-0	ACG	5,000	ACG	400					X			X	
Trichlorosilane	[Silane, trichloro-]	10025-78-2	1.00	10,000			ACG	APA	X	X					X
Triethanolamine		102-71-6			80.00	220						X			
Triethanolamine hydrochloride		637-39-8			80.00	220						X			
Triethyl phosphite		122-52-1			80.00	220						X			
Trifluoroacetyl chloride		354-32-5			6.93	45				X					
Trifluorochloroethylene	[Ethene, chlorotrifluoro]	79-38-9	1.00	10,000	66.67	500				X			X		
Trimethylamine	[Methanamine, N,N-dimethyl-]	75-50-3	1.00	10,000					X	X					
Trimethylchlorosilane	[Silane, chlorotrimethyl-]	75-77-4	1.00	10,000			ACG	APA		X		X			X
Trimethyl phosphite		121-45-9			80.00	220									
Trinitroaniline		26952-42-1	ACG	5,000	ACG	400					X			X	
Trinitroanisole		606-35-9	ACG	5,000	ACG	400					X			X	
Trinitrobenzene		99-35-4	ACG	5,000	ACG	400					X			X	
Trinitrobenzenesulfonic acid		2508-19-2	ACG	5,000	ACG	400					X			X	
Trinitrobenzoic acid		129-66-3	ACG	5,000	ACG	400					X			X	
Trinitrochlorobenzene		88-89-0	ACG	5,000	ACG	400					X			X	
Trinitrofluorenone		129-79-3	ACG	5,000	ACG	400					X			X	
Trinitro-meta-cresol		602-99-3	ACG	5,000	ACG	400					X			X	
Trinitronaphthalene		55810-17-8	ACG	5,000	ACG	400					X			X	
Trinitrophenetole		4732-14-3	ACG	5,000	ACG	400					X			X	
Trinitrophenol		88-89-1	ACG	5,000	ACG	400					X			X	
Trinitroresorcinol		82-71-3	ACG	5,000	ACG	400					X			X	
Tritonal		54413-15-9	ACG	5,000	ACG	400					X			X	
Tungsten hexafluoride		7783-82-6			7.10	45							X		

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Appendix A to Part 27. -- DHS Chemicals of Interest [1]

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage	Security Issue							
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Vinyl acetate monomer	[Acetic acid ethenyl ester]	108-05-4	1.00	10,000						X					
Vinyl acetylene	[1-Buten-3-yne]	689-97-4	1.00	10,000						X					
Vinyl chloride	[Ethene, chloro-]	75-01-4	1.00	10,000						X					
Vinyl ethyl ether	[Ethene, ethoxy-]	109-92-2	1.00	10,000						X					
Vinyl fluoride	[Ethene, fluoro-]	75-02-5	1.00	10,000						X					
Vinyl methyl ether	[Ethene, methoxy-]	107-25-5	1.00	10,000						X					
Vinylidene chloride	[Ethene, 1,1-dichloro-]	75-35-4	1.00	10,000						X					
Vinylidene fluoride	[Ethene, 1,1-difluoro-]	75-38-7	1.00	10,000						X					
Vinyltrichlorosilane		75-94-5				CUM 100g	ACG	APA					X		X
VX	[o-Ethyl-S-2-diisopropylaminoethyl methyl phosphonothiolate]	50782-69-9													
Zinc hydrosulfite	[Zinc dithionite]	7779-86-4					ACG	APA							X

[1] The acronyms used in this appendix have the following meaning: ACG = A Commercial Grade; APA = A Placarded Amount; CW/CWP = Chemical Weapons/Chemical Weapons Precursors; WME = Weapons of Mass Effect; EXP/IEDP = Explosives/Improvised Explosive Device Precursors

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