

REGULATED MATERIALS REFERENCE

10/30/2015

Regulated Materials Guidelines /Lists

These guidelines were developed for identification of potentially regulated materials and activities. The list is not all-inclusive. Each regulatory document must be consulted prior to the use of any item that is regulated. References have been included in each section to direct the user to additional and the most recent information. Contact the OEHS at 824-2171 for more information

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Section 1- LASER CLASSIFICATION

Virtually all of the U.S. domestic as well as all international standards divide lasers into four major hazard categories called the laser hazard classifications. The classes are based upon a scheme of graded risk. They are based upon the ability of a beam to cause biological damage to the eye or skin.

Class I: cannot emit laser radiation at known hazard levels. Users of Class I laser products are generally exempt from radiation hazard controls during operation and maintenance (but not necessarily during service). Since lasers are not classified on beam access during service, most Class I industrial lasers will consist of a higher class (high power) laser enclosed in a properly interlocked and labeled protective enclosure. An example of a Class I laser is printer

Class I.A.: a special designation that is based upon a 1000-second exposure and applies only to lasers that are "not intended for viewing" such as a supermarket laser scanner.

Class II: low-power visible lasers that emit above Class I levels but at a radiant power not above 1 mW. The concept is that the human aversion reaction to bright light will protect a person. Only limited controls are specified. An example for this category is a bar code scanner.

Class IIIA: intermediate power lasers. Only hazardous for intrabeam viewing. Some limited controls are usually recommended.

NOTE: There are different logotype labeling requirements for Class IIIA lasers with a beam irradiance that does not exceed 2.5 mW/cm² (Caution logotype) and those where the beam irradiance does exceed 2.5 mW/cm² (Danger logotype).

Class IIIB: moderate power lasers. In general Class IIIB lasers will not be a fire hazard, nor are they generally capable of producing a hazardous diffuse reflection. Specific controls are recommended.

Class IV: High power lasers are hazardous to view under any condition (directly or diffusely scattered) and are a potential fire hazard and a skin hazard. Significant controls are required of Class IV laser facilities.

- ANSI Guidelines for the Safe Use of Lasers Z136.1
<http://www.national-laser.com/laser-classification.htm>
- OSHA Regulations; 29 CFR 1926.54 (non-ionizing radiations)
http://www.osha.gov/dts/osta/otm/otm_iii/otm_iii_6.html#4
http://www.osha.gov/dts/osta/otm/otm_iii/otm_iii_6.html

Section 2 - HAZARDOUS WASTE

The following section is an excerpt from the UAHuntsville Waste Management Plan Appendices. The hazardous waste list was chosen for this guide because it is the most inclusive list of hazards without being cumbersome. Please note that letters have been placed next to chemicals to indicate specific hazards(s).

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|----------|--------------------------------|
| I | Ignitable |
| C | Corrosive |
| R | Reactive |
| E | Toxicity Characteristic |
| H | Acutely Hazardous |
| T | Toxic |

It is important when utilizing this list for chemical classification to be aware that although the chemical may not be listed as hazardous on this list it may be listed elsewhere. Other sources for chemical hazards information are safety data sheets, the manufacturer, and the OEHS.

Additional Information:

- Occupational Safety and Health Administration (OSHA) regulations
<http://www.osha.gov/>
- 29 CFR 1910.1450 (Occupational Exposures to Hazardous Chemicals in Laboratories)
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10106
- 29 CFR 1910.119 (Process Safety Management of Highly Hazardous Chemicals)
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9760
- 29 CFR 1910.1200 (Hazard Communication Standard)
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10099
- Environmental Protection Agency (EPA) Regulations
<http://www.epa.gov/>
- 40 CFR 261 (RCRA Hazardous Waste Identification)
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title40/40cfr261_main_02.tpl
- 40 CFR 700-799 (Toxic Substance and Control Act)
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?sid=e748b949e8839d699aea0d3b0940ae17&c=ecfr&tpl=/ecfrbrowse/Title40/40cfrv32_02.tpl
- Alabama Department of Environmental Management (ADEM)
<http://www.adem.state.al.us/default.cnt>

The P-list and the U-list (discarded commercial chemical products)

These lists include specific commercial chemical products in an unused form. Some pesticides and some pharmaceutical products become hazardous waste when discarded.

Specific Chemical Substances: P-listed Chemicals

| EPA | CAS No. | Substance |
|-------------|----------------|--|
| ID | | |
| P023 | 107-20-0 | Acetaldehyde, chloro- |
| P002 | 591-08-2 | Acetamide, N-(aminothioxomethyl)- |
| P057 | 640-19-7 | Acetamide, 2-fluoro- |
| P058 | 62-74-8 | Acetic acid, fluoro-, sodium salt |
| P002 | 591-08-2 | 1-Acetyl-2-thiourea |
| P003 | 107-02-8 | Acrolein |
| P070 | 116-06-3 | Aldicarb |
| P203 | 1646-88-4 | Aldicarb sulfone. |
| P004 | 309-00-2 | Aldrin |
| P005 | 107-18-6 | Allyl alcohol |
| P006 | 20859-73-8 | Aluminum phosphide (R,T) |
| P007 | 2763-96-4 | 5-(Aminomethyl)-3-isoxazolol |
| P008 | 504-24-5 | 4-Aminopyridine |
| P009 | 131-74-8 | Ammonium picrate (R) |
| P119 | 7803-55-6 | Ammonium vanadate |
| P099 | 506-61-6 | Argentate(1-), bis(cyano-C)-, potassium |
| P010 | 7778-39-4 | Arsenic acid H ₃ AsO ₄ |
| P012 | 1327-53-3 | Arsenic oxide As ₂ O ₃ |
| P011 | 1303-28-2 | Arsenic oxide As ₂ O ₅ |
| P011 | 1303-28-2 | Arsenic pentoxide |
| P012 | 1327-53-3 | Arsenic trioxide |

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|-------------|------------|--|
| P038 | 692-42-2 | Arsine, diethyl- |
| P036 | 696-28-6 | Arsonous dichloride, phenyl- |
| P054 | 151-56-4 | Aziridine |
| P067 | 75-55-8 | Aziridine, 2-methyl- |
| P013 | 542-62-1 | Barium cyanide |
| P024 | 106-47-8 | Benzenamine, 4-chloro- |
| P077 | 100-01-6 | Benzenamine, 4-nitro- |
| P028 | 100-44-7 | Benzene, (chloromethyl)- |
| P042 | 51-43-4 | 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)- |
| P046 | 122-09-8 | Benzeneethanamine, alpha,alpha-dimethyl- |
| P014 | 108-98-5 | Benzenethiol |
| P127 | 1563-66-2 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate. |
| P188 | 57-64-7 | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)- 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylp yrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1) |
| P001 | 181-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3% |
| P028 | 100-44-7 | Benzyl chloride |
| P015 | 7440-41-7 | Beryllium powder |
| P017 | 598-31-2 | Bromoacetone |
| P018 | 357-57-3 | Brucine |
| P045 | 39196-18-4 | 2-Butanone, 3,3-dimethyl-1-(methylthio)- O-[methylamino]carbonyl] oxime |
| P021 | 592-01-8 | Calcium cyanide |
| P189 | 55285-14-8 | Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester. |

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| P191 | 644-64-4 | Carbamic acid, dimethyl-, 1-[(dimethyl- amino)carbonyl]- 5-methyl-1H- pyrazol- 3-yl ester. |
| P192 | 119-38-0 | Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H-pyrazol-5-yl ester. |
| P190 | 1129-41-5 | Carbamic acid, methyl-, 3-methylphenyl ester. |
| P127 | 1563-66-2 | Carbofuran. |
| P022 | 75-15-0 | Carbon disulfide |
| P095 | 75-44-5 | Carbonic dichloride |
| P189 | 55285-14-8 | Carbosulfan. |
| P023 | 107-20-0 | Chloroacetaldehyde |
| P024 | 106-47-8 | p-Chloroaniline |
| P026 | 5344-82-1 | 1-(o-Chlorophenyl)thiourea |
| P027 | 542-76-7 | 3-Chloropropionitrile |
| P029 | 544-92-3 | Copper cyanide |
| P202 | 64-00-6 | m-Cumenyl methylcarbamate. |
| P030 | | Cyanides (soluble cyanide salts), not otherwise specified |
| P031 | 460-19-5 | Cyanogen |
| P033 | 506-77-4 | Cyanogen chloride |
| P034 | 131-89-5 | 2-Cyclohexyl-4,6-dinitrophenol |
| P016 | 542-88-1 | Dichloromethyl ether |
| P036 | 696-28-6 | Dichlorophenylarsine |
| P037 | 60-57-1 | Dieldrin |
| P038 | 692-42-2 | Diethylarsine |
| P041 | 311-45-5 | Diethyl-p-nitrophenyl phosphate |
| P040 | 297-97-2 | O,O-Diethyl O-pyrazinyl phosphorothioate |
| P043 | 55-91-4 | Diisopropylfluorophosphate (DFP) |

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| P004 | 309-00-2 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4, 10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta, 5alpha,8alpha,8abeta)- |
| P060 | 465-7 3-6 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a-hexahydro-,(1alpha, 4alpha,4abeta,5beta,8beta,8abeta)- |
| P037 | 60-57-1 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta, 2aalpha, 3beta,6beta,6aalpha,7beta, 7aalpha)- |
| P051 | fn1 72-20-8 | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta, 2abeta,3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites |
| P044 | 60-51-5 | Dimethoate |
| P046 | 122-09-8 | alpha,alpha-Dimethylphenethylamine |
| P191 | 644-64-4 | Dimetilan. |
| P047 | fn1 534-52-1 | 4,6-Dinitro-o-cresol, & salts |
| P048 | 51-28-5 | 2,4-Dinitrophenol |
| P020 | 88-85-7 | Dinoseb |
| P085 | 152-16-9 | Diphosphoramide, octamethyl- |
| P111 | 107-49-3 | Diphosphoric acid, tetraethyl ester |
| P039 | 298-04-4 | Disulfoton |
| P049 | 541-53-7 | Dithiobiuret |
| P185 | 26419-73-8 | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)- carbonyl]oxime. |
| P050 | 115-29-7 | Endosulfan |
| P088 | 145-73-3 | Endothall |
| P051 | 72-20-8 | Endrin |
| P051 | 72-20-8 | Endrin, & metabolites |

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| P042 | 51-43-4 | Epinephrine |
| P031 | 460-19-5 | Ethane dinitrile |
| P194 | 23135-22-0 | Ethanimidothioc acid, 2-(dimethylamino)-N- [[(methylamino) carbonyl]oxy]-2 -oxo-, methyl ester. |
| P066 | 16752-77-5 | Ethanimidothioic acid, N-[[[(methylamino) carbonyl]oxy]-, methyl ester |
| P101 | 107-12-0 | Ethyl cyanide |
| P054 | 151-56-4 | Ethyleneimine |
| P097 | 52-85-7 | Famphur |
| P056 | 7782-41-4 | Fluorine |
| P057 | 640-19-7 | Fluoroacetamide |
| P058 | 62-74-8 | Fluoroacetic acid, sodium salt |
| P198 | 23422-53-9 | Formetanate hydrochloride. |
| P197 | 17702-57-7 | Formparanate. |
| P065 | 628-86-4 | Fulminic acid, mercury(2+) salt (R,T) |
| P059 | 76-44-8 | Heptachlor |
| P062 | 757-58-4 | Hexaethyl tetraphosphate |
| P116 | 79-19-6 | Hydrazinecarbothioamide |
| P068 | 60-34-4 | Hydrazine, methyl- |
| P063 | 74-90-8 | Hydrocyanic acid |
| P063 | 74-90-8 | Hydrogen cyanide |
| P096 | 7803-51-2 | Hydrogen phosphide |
| P060 | 465-73-6 | Isodrin |
| P192 | 119-38-0 | Isolan. |
| P202 | 64-00-6 | 3-Isopropylphenyl N-methylcarbamate. |
| P007 | 2763-96-4 | 3(2H)-Isox azolone, 5-(aminomethyl)- |

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| P196 | 15339-36-3 | Manganese, bis(dimethylcarbamo-dithioato-S,S')-, |
| P196 | 15339-36-3 | Manganese dimethyldithiocarbamate. |
| P092 | 62-38-4 | Mercury, (acetato-O)phenyl- |
| P065 | 628-86-4 | Mercury fulminate (R,T) |
| 1P192 | 23422-53-9 | Methanimidamide, N,N-dimethyl-N'-[3- [[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride. |
| P197 | 17702-57-7 | Methanimidamide, N,N-dimethyl-N'-[2-methyl-4- [[[(methylamino)carbonyl]oxy]p henyl]- |
| P082 | 62-75-9 | Methanamine, N-methyl-N-nitroso- |
| P064 | 624-83-9 | Methane, isocyanato- |
| P016 | 542-88-1 | Methane, oxybis[chloro- |
| P112 | 509-14-8 | Methane, tetranitro- (R) |
| P118 | 75-70-7 | Methanethiol, trichloro- |
| P050 | 115-29-7 | 6,9-Methano-2,4,3-benzodioxathiepin , 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide |
| P059 | 76-44-8 | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro- |
| P199 | 2032-65-7 | Methiocarb. |
| P066 | 16752-77-5 | Methomyl |
| P068 | 60-34-4 | Methyl hydrazine |
| P064 | 624-83-9 | Methyl isocyanate |
| P069 | 75-86-5 | 2-Methylactonitrile |
| P071 | 298-00-0 | Methyl parathion |
| P190 | 1129-41-5 | Metolcarb. |
| P128 | 315-18-4 | Mexacarbate. |
| P072 | 86-88-4 | alpha-Naphthylth iourea |

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| P073 | 13463-39-3 | Nickel carbonyl |
| P073 | 13463-39-3 | Nickel carbonyl Ni(CO) ₄ , (T-4)- |
| P074 | 557-19-7 | Nickel cyanide |
| P074 | 557-19-7 | Nickel cyanide Ni(CN) ₂ |
| P075 | fn1 54-11-5 | Nicotine, & salts |
| P076 | 10102-43-9 | Nitric oxide |
| P077 | 100-01-6 | p-Nitroaniline |
| P078 | 10102-44-0 | Nitrogen dioxide |
| P076 | 10102-43-9 | Nitrogen oxide NO |
| P078 | 10102-44-0 | Nitrogen oxide NO ₂ |
| P081 | 55-63-0 | Nitroglycerine (R) |
| P082 | 62-75-9 | N-Nitrosodimethylamine |
| P084 | 4549-40-0 | N- Nitrosomethylvinylamine |
| P085 | 152-16-9 | Octamethylpyrophosphor amide |
| P087 | 20816-12-0 | Osmium oxide OsO ₄ , (T-4)- |
| P087 | 20816-12-0 | Osmium tetroxide |
| P088 | 145-73-3 | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid |
| P194 | 23135-22-0 | Oxamyl. |
| P089 | 56-38-2 | Parathion |
| P034 | 131-89-5 | Phenol, 2-cyclohexyl-4,6-dinitro- |
| P048 | 51-28-5 | Phenol, 2,4-dinitro- |
| P047 | fn1 534-52-1 | Phenol, 2-methyl-4,6-dinitro-, & salts |
| P020 | 88-85-7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- |
| P009 | 131-74-8 | Phenol, 2,4,6-trinitro-, ammonium salt (R) |
| P128 | 315-18-4 | Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester). |

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|-------------|-----------|---|
| P199 | 2032-65-7 | Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate |
| P202 | 64-00-6 | Phenol, 3-(1-methylethyl)-, methyl carbamate. |
| P201 | 2631-37-0 | Phenol, 3-methyl-5-(1-methylethyl)-, methyl |
| | | carbamate. |
| P092 | 62-38-4 | Phenylmercury acetate |
| P093 | 103-85-5 | Phenylthiourea |
| P094 | 298-02-2 | Phorate |
| P095 | 75-44-5 | Phosgene |
| P096 | 7803-51-2 | Phosphine |
| P041 | 311-45-5 | Phosphoric acid, diethyl 4-nitrophenyl ester |
| P039 | 298-04-4 | Phosphorodithioic acid, O,O-diethyl |
| | | S-[2-(ethylthio)ethyl] ester |
| P094 | 298-02-2 | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester |
| P044 | 60-51-5 | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)- 2-oxoethyl] ester |
| P043 | 55-91-4 | Phosphorofluoridic acid, bis(1-methylethyl) ester |
| P089 | 56-38-2 | Phosphorothioic aci O,O-dimethyl ester |
| P040 | 297-97-2 | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester |
| P097 | 52-85-7 | Phosporothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl]0,0-dimethyl ester |
| P071 | 298-00-0 | Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester |
| P204 | 57-47-6 | Physostigmine. |
| P188 | 57-64-7 | Physostigmine salicylate. |
| P110 | 78-00-2 | Plumbane, tetraethyl- |
| P098 | 151-50-8 | Potassium cyanide |
| P098 | 151-50-8 | Potassium cyanide K(CN) |

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| P099 | 506-61-6 | Potassium silver cyanide |
| P201 | 2631-37-0 | Promecarb |
| P070 | 116-06-3 | Propanal, 2-methyl-2-(methylthio)-, O- [(methylamino)carbonyl]oxime |
| P203 | 1646-88-4 | Propanal, 2-methyl-2-(methyl-sulfonyl)-, O- [(methylamino)carbonyl] oxime. |
| P101 | 107-12-0 | Propanenitrile |
| P027 | 542-76-7 | Propanenitrile, 3-chloro- |
| P069 | 75-86-5 | Propanenitrile, 2-hydroxy-2-methyl- |
| P081 | 55-63-0 | 1,2,3-Propanetriol, trinitrate (R) |
| P017 | 598-31-2 | 2-Propanone, 1-bromo- |
| P102 | 107-19-7 | Propargyl alcohol |
| P003 | 107-02-8 | 2-Propenal |
| P005 | 107-18-6 | 2-Propen-1-ol |
| P067 | 75-55-8 | 1,2-Propylenimine |
| P102 | 107-19-7 | 2-Propyn-1-ol |
| P008 | 504-24-5 | 4-Pyridinamine |
| P075 | fn1 54-11-5 | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts |
| P204 | 57-47-6 | Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a- hexahydro-1,3a,8- trimethyl-, methylcarbamate (ester), (3aS-cis)- |
| P114 | 12039-52-0 | Selenious acid, dithallium(1+) salt |
| P103 | 630-10-4 | Selenourea |
| P104 | 506-64-9 | Silver cyanide |
| P104 | 506-64-9 | Silver cyanide Ag(CN) |
| P105 | 26628-22-8 | Sodium azide |
| P106 | 143-33-9 | Sodium cyanide |

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|-------------|-------------|---|
| P106 | 143-33-9 | Sodium cyanide Na(CN) |
| P108 | fn1 57-24-9 | Strychnidin-10-one, & salts |
| P018 | 357-57-3 | Strychnidin-10-one, 2,3-dimethoxy- |
| P108 | fn1 57-24-9 | Strychnine, & salts |
| P115 | 7446-18-6 | Sulfuric acid, dithallium(1+) salt |
| P109 | 3689-24-5 | Tetraethyldithiopyrophosphate |
| P110 | 78-00-2 | Tetraethyl lead |
| P111 | 107-49-3 | Tetraethyl pyrophosphate |
| P112 | 509-14-8 | Tetranitromethane (R) |
| P062 | 757-58-4 | Tetraphosphoric acid, hexaethyl ester |
| P113 | 1314-32-5 | Thallic oxide |
| P113 | 1314-32-5 | Thallium oxide Tl ₂ O ₃ |
| P114 | 12039-52-0 | Thallium(I) selenite |
| P115 | 7446-18-6 | Thallium(I) sulfate |
| P109 | 3689-24-5 | Thiodiphosphoric acid, tetraethyl ester |
| P045 | 39196-18-4 | Thiofanox |
| P049 | 541-53-7 | Thioimidodi carbonic diamide [(H ₂ N)C(S)] ₂ NH |
| P014 | 108-98-5 | Thiophenol |
| P116 | 79-19-6 | Thiosemicarbazide |
| P026 | 5344-82-1 | Thiourea, (2-chlorophenyl)- |
| P072 | 86-88-4 | Thiourea, 1-naphthalenyl- |
| P093 | 103-85-5 | Thiourea, phenyl- |
| P185 | 26419-73-8 | Tirpate. |
| P123 | 8001-35-2 | Toxaphene |
| P118 | 75-70-7 | Trichlorome thanethiol |

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| P119 | 7803-55-6 | Vanadic acid, ammonium salt |
| P120 | 1314-62-1 | Vanadium oxide V ₂ O ₅ |
| P120 | 1314-62-1 | Vanadium pentoxide |
| P084 | 4549-40-0 | Vinylamine, N-methyl-N-nitroso- |
| P001 | 81-81-2 | Warfarin, & salts, when present at concentrations greater than 0.3% |
| P205 | 137-30-4 | Zinc, bis(dimethylcarbamodithioato-S,S)- |
| P121 | 557-21-1 | Zinc cyanide |
| P121 | 557-21-1 | Zinc cyanide Zn(CN) ₂ |
| P122 | 1314-84-7 | Zinc phosphide Z ₃ P ₂ , when present at concentrations greater than 10% (R,T) |
| P205 | 137-30-4 | Ziram. |

U-listed Chemicals

http://web.princeton.edu/sites/ehs/chemwaste/spec_list.htm

| EPA ID No. | CAS No. | Substance |
|-------------------|----------------|---|
| U394 | 30558-43-1 | A2213 |
| U001 | 75-07-0 | Acetaldehyde (I) |
| U034 | 75-87-6 | Acetaldehyde, trichloro- |
| U187 | 62-44-2 | Acetamide, N-(4-ethoxyphenyl)- |
| U005 | 53-96-3 | Acetamide, N-9H-fluoren-2-yl- |
| U240 | n1 94-75-7 | Acetic acid, (2,4-dichlorophenoxy)-, salts & esters |
| U112 | 141-78-6 | Acetic acid ethyl ester (I) |
| U144 | 301-04-2 | Acetic acid, lead(2+) salt |
| U214 | 563-68-8 | Acetic acid, thallium(1+) salt |

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|---------------------|------------|---|
| see F027 | 93-76-5 | Acetic acid, (2,4,5-trichlorophenoxy)- |
| U002 | 67-64-1 | Acetone (I) |
| U003 | 75-05-8 | Acetonitrile (I,T) |
| U004 | 98-86-2 | Acetophenone |
| U005 | 53-96-3 | 2-Acetylaminofluorene |
| U006 | 75-36-5 | Acetyl chloride (C,R,T) |
| U007 | 79-06-1 | Acrylamide |
| U008 | 79-10-7 | Acrylic acid (I) |
| U009 | 107-13-1 | Acrylonitrile |
| U011 | 61-82-5 | Amitrole |
| U012 | 62-53-3 | Aniline (I,T) |
| U136 | 75-60-5 | Arsinic acid, dimethyl- |
| U014 | 492-80-8 | Auramine |
| U015 | 115-02-6 | Azaserine |
| U010 | 50-07-7 | Azirino[2,3: 3,4]pyrrolo [1,2-a]indole-4,7-dione, 6-amino-8- [[aminocarbonyl) oxy]methyl]-1,1a,2,8,8a,8b- hexahydro-8a- methoxy-5-methyl-, (1aalpha, 8beta, 8aalpha,8balpha)] |
| U280 | 101-27-9 | Barban. |
| U278 | 22781-23-3 | Bendiocarb. |
| U364 | 22961-82-6 | Bendiocarb phenol. |
| U271 | 17804-35-2 | Benomyl. |
| U157 | 56-49-5 | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- |
| U016 | 225-51-4 | Benz[c]acridine |
| U017 | 9 8-87-3 | Benzal chloride |
| U192 | 23950-58-5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- |

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| U018 | 56-55-3 | Benz[a]anthracene |
| U094 | 57-97-6 | Benz[a]anthracene, 7,12-dimethyl- |
| U012 | 62-53-3 | Benzenamine (I,T) |
| U014 | 492-80-8 | Benzenamine, 4,4 -carbonimidoylbis[N,N-dimethyl- |
| U049 | 3165-93-3 | Benzenamine, 4-chloro-2-methyl-, hydrochloride |
| U093 | 60-11-7 | Benzenamine, N,N-dimethyl-4-(phenylazo)- |
| U328 | 95-53-4 | Benzenamine, 2-methyl- |
| U353 | 106-49-0 | Benzenamine, 4-methyl- |
| U158 | 101-14-4 | Benzenamine, 4,4 -methylenebis[2-chloro- |
| U222 | 636-21-5 | Benzenamine, 2-methyl-, hydrochloride |
| U181 | 99-55-8 | Benzenamine, 2-methyl-5-nitro- |
| U019 | 71-43-2 | Benzene (I,T) |
| U038 | 510-15-6 | Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester |
| U030 | 101-55-3 | Benzene, 1-bromo-4-phenoxy- |
| U035 | 305-03-3 | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- |
| U037 | 108-90-7 | Benzene, chloro- |
| U221 | 25376-45-8 | Benzenediamine, ar-methyl- |
| U028 | 117-81-7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester |
| U069 | 84-74-2 | 1,2-Benzenedicarboxylic acid, dibutyl ester |
| U088 | 84-66-2 | 1,2-Benzenedicarboxylic acid, diethyl ester |
| U102 | 131-11-3 | 1,2-Benzenedicarboxylic acid, dimethyl ester |
| U107 | 117-84-0 | 1,2-Benzenedicarboxylic acid, dioctyl ester |
| U070 | 95-50-1 | Benzene, 1,2-dichloro- |

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| U071 | 541-73-1 | Benzene, 1,3-dichloro- |
| U072 | 106-46-7 | Benzene, 1,4-dichloro- |
| U060 | 72-54-8 | Benzene, 1,1 -(2,2-dichloroethylidene)bis[4-chloro- |
| U017 | 98-87-3 | Benzene, (dichloromethyl)- |
| U223 | 26471-62-5 | Benzene, 1,3-diisocyanatomethyl- (R,T) |
| U239 | 1330-20-7 | Benzene, dimethyl- (I,T) |
| U201 | 108-46-3 | 1,3-Benzenediol |
| U127 | 118-74-1 | Benzene , hexachloro- |
| U056 | 110-82-7 | Benzene, hexahydro- (I) |
| U220 | 108-88-3 | Benzene, methyl- |
| U105 | 121-14-2 | Benzene, 1-methyl-2,4-dinitro- |
| U106 | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| U055 | 98-82-8 | Benzene, (1-methylethyl)- (I) |
| U169 | 98-95-3 | Benzene, nitro- |
| U183 | 608-93-5 | Benzene, pentachloro- |
| U185 | 82-68-8 | Benzene, pentachloronitro- |
| U020 | 98-09-9 | Benzenesulfonic acid chloride (C,R) |
| U020 | 98-09-9 | Benzenesulfonyl chloride (C,R) |
| U207 | 95-94-3 | Benzene, 1,2,4,5-tetrachloro- |
| U061 | 50-29-3 | Benzene, 1,1 -(2,2,2-trichloroethylidene)bis[4-chloro- |
| U247 | 72-43-5 | Benzene, 1,1 -(2,2,2-trichloroethylidene)bis[4- methoxy- |
| U023 | 98-07-7 | Benzene, (trichloromethyl)- |
| U234 | 99-35-4 | Benzene, 1,3,5-trinitro- |
| U021 | 92-87-5 | Benzidine |

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| U202 | fn1 81-07-2 | 1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts |
| U278 | 22781-23-3 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate |
| U364 | 22961-82-6 | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, |
| U203 | 94-59-7 | 1,3-Benzodioxole, 5-(2-propenyl)- |
| U141 | 120-58-1 | 1,3-Benzodioxole, 5-(1-propenyl)- |
| U367 | 1563-38-8 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- |
| U090 | 94-58-6 | 1,3-Benzodioxole, 5-propyl- |
| U064 | 189-55-9 | Benzo[<i>a</i>]pentalene |
| U248 | n1 81-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less |
| U022 | 50-32-8 | Benzo[<i>a</i>]pyrene |
| U197 | 106-51-4 | p-Benzoquinone |
| U023 | 98-07-7 | Benzotrichloride (C,R,T) |
| U085 | 1464-53-5 | 2,2 -Bioxirane |
| U021 | 92-87-5 | [1,1 -Biphenyl_4,4 -diamine |
| U073 | 91-94-1 | [1,1'-Biphenyl_4,4'-diamine, 3,3'-dichloro- |
| U091 | 119-90-4 | [1,1'-Biphenyl_4,4'-diamine, 3,3'-dimethoxy- |
| U095 | 119-93-7 | [1,1'-Biphenyl_4,4'-diamine, 3,3'-dimethyl- |
| U225 | 75-25-2 | Bromoform |
| U030 | 101-55-3 | 4-Bromophenyl phenyl ether |
| U128 | 87-68-3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- |
| U172 | 924-16-3 | 1-Butanamine, N-butyl-N-nitroso- |
| U031 | 71-36-3 | 1-Butanol (I) |
| U159 | 78-93-3 | 2-Butanone (I,T) |

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| U160 | 1338-23-4 | 2-Butanone, peroxide (R,T) |
| U053 | 4170-30-3 | 2-Butenal |
| U074 | 764-41-0 | 2-Butene, 1,4-dichloro- (I,T) |
| U143 | 303-34-4 | 2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy- 2-(1-methoxyethyl)-3-methyl-1-oxobutoxy _methyl_-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*),7alpha__- |
| U031 | 71-36-3 | n-Butyl alcohol (I) |
| U136 | 75-60-5 | Cacodylic acid |
| U032 | 13765-19-0 | Calcium chromate |
| U372 | 10605-21-7 | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester. |
| U271 | 17804-35-2 | Carbamic acid, [1-[(butylamino)carbonyl -1H-benzimidazol-2-yl -, methyl ester. |
| U280 | 101-27-9 | Carbamic acid, (3-chlorophenyl)-, 4-chloro- 2-butynyl ester. |
| U238 | 51-79-6 | Carbamic acid, ethyl ester |
| U178 | 615-53-2 | Carbamic acid, methylnitroso-, ethyl ester |
| U373 | 122-42-9 | Carbamic acid, phenyl-, 1-methylethyl ester. |
| U409 | 23564-05-8 | Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl) bis-, dimethyl ester. |
| U097 | 79-44-7 | Carbamic chloride, dimethyl- |
| U114 | 111-54-6 | Carbamodithioic acid, 1,2-ethanediylbis-,salts & esters |
| U062 | 2303-16-4 | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester |
| U389 | 2303-17-5 | Carbamothioic acid, bis(1-methylethyl)-, S- (2,3,3-trichloro-2-propenyl) ester. |
| U387 | 52888-80-9 | Carbamothioic acid, dipropyl-, S- (phenylmethyl) ester. |
| U279 | 63-25-2 | Carbaryl. |

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| U372 | 10605-21- 7 | Carbendazim. |
| U367 | 1563-38-8 | Carbofuran phenol. |
| U215 | 6533-73-9 | Carbonic acid, dithallium(1+) salt |
| U033 | 353-50-4 | Carbonic difluoride |
| U156 | 79-22-1 | Carbonochloridic acid, methyl ester (I,T) |
| U033 | 353-50-4 | Carbon oxyfluoride (R,T) |
| U211 | 56-23-5 | Carbon tetrachloride |
| U034 | 75-87-6 | Chloral |
| U035 | 305-03-3 | Chlorambucil |
| U036 | 57-74-9 | Chlordane, alpha & gamma isomers |
| U026 | 494-03-1 | Chlornaphazin |
| U037 | 108-90-7 | Chlorobenzene |
| U038 | 510-15-6 | Chlorobenzilate |
| U039 | 59-50-7 | p-Chloro-m-cresol |
| U042 | 110-75-8 | 2-Chloroethyl vinyl ether |
| U044 | 67-66-3 | Chloroform |
| U046 | 107-30-2 | Chloromethyl methyl ether |
| U047 | 91-58-7 | beta-Chloronaphthalene |
| U048 | 95-57-8 | o-Chlorophenol |
| U049 | 3165-93-3 | 4-Chloro-o-toluidine, hydrochloride |
| U032 | 13765-19-0 | Chromic acid H ₂ CrO ₄ , calcium salt |
| U050 | 218-01-9 | Chrysene |
| U051 | | Creosote |
| U052 | 1319-77-3 | Cresol (Cresylic acid) |
| U053 | 4170-30-3 | Crotonaldehyde |

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| U055 | 98-82-8 | Cumene (I) |
| U246 | 506-68-3 | Cyanogen bromide (CN)Br |
| U197 | 106-51-4 | 2,5-Cyclohexadiene-1,4-dione |
| U056 | 110-82-7 | Cyclohexane (I) |
| U129 | 58-89-9 | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)- |
| U057 | 108-94-1 | Cyclohexanone (I) |
| U130 | 77-47-4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- |
| U058 | 50-18-0 | Cyclophosphamide |
| U240 | n1 94-75-7 | 2,4-D, salts & esters |
| U059 | 20830-81-3 | Daunomycin |
| U060 | 72-54-8 | DDD |
| U061 | 50-29-3 | DDT |
| U062 | 2303-16-4 | Diallate |
| U063 | 53-70-3 | Dibenz[a,h]anthracene |
| U064 | 189-55-9 | Dibenzo[a,i]pyrene |
| U066 | 96-12-8 | 1,2-Dibromo-3-chloropropane |
| U069 | 84-74-2 | Dibutyl phthalate |
| U070 | 95-50-1 | o-Dichlorobenzene |
| U071 | 541-73-1 | m-Dichlorobenzene |
| U072 | 106-46-7 | p-Dichlorobenzene |
| U073 | 91-94-1 | 3,3'-Dichlorobenzidine |
| U074 | 764-41-0 | 1,4-Dichloro-2-butene (I,T) |
| U075 | 75-71-8 | Dichlorodifluoromethane |
| U078 | 75-35-4 | 1,1-Dichloroethylene |

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| U079 | 156-60-5 | 1,2-Dichloroethylene |
| U025 | 111-44-4 | Dichloroethyl ether |
| U027 | 108-60-1 | Dichloroisopropyl ether |
| U024 | 111-91-1 | Dichloromethoxy ethane |
| U081 | 120-83-2 | 2,4-Dichlorophenol |
| U082 | 87-65-0 | 2,6-Dichlorophenol |
| U084 | 542-75-6 | 1,3-Dichloropropene |
| U085 | 1464-53-5 | 1,2:3,4-Diepoxybutane (I,T) |
| U395 | 5952-26-1 | Diethylene glycol, dicarbamate. |
| U108 | 123-91-1 | 1,4-Diethyleneoxide |
| U028 | 117-81-7 | Diethylhexyl phthalate |
| U086 | 1615-80-1 | N,N'-Diethylhydrazine |
| U087 | 3288-58-2 | O,O-Diethyl S-methyl dithiophosphate |
| U088 | 84-66-2 | Diethyl phthalate |
| U089 | 56-53-1 | Diethylstilbesterol |
| U090 | 94-58-6 | Dihydrosafrole |
| U091 | 119-90-4 | 3,3'-Dimethoxybenzidine |
| U092 | 124-40-3 | Dimethylamine (I) |
| U093 | 60-11-7 | p-Dimethylaminoazobenzene |
| U094 | 57-97-6 | 7,12-Dimethylbenz[a]anthracene |
| U095 | 119-93-7 | 3,3'-Dimethylbenzidine |
| U096 | 80-15-9 | alpha,alpha-Dimethylbenzylhydroperoxide (R) |
| U097 | 79-44-7 | Dimethylcarbamoyl chloride |
| U098 | 57-14-7 | 1,1-Dimethylhydrazine |
| U099 | 540-73-8 | 1,2-Dimethylhydrazine |

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| U101 | 105-67-9 | 2,4-Dimethylphenol |
| U102 | 131-11-3 | Dimethyl phthalate |
| U103 | 77-78-1 | Dimethyl sulfate |
| U105 | 121-14-2 | 2,4-Dinitrotoluene |
| U106 | 606-20-2 | 2,6-Dinitrotoluene |
| U107 | 117-84-0 | Di-n-octyl phthalate |
| U108 | 123-91-1 | 1,4-Dioxane |
| U109 | 122-66-7 | 1,2-Diphenylhydrazine |
| U110 | 142-84-7 | Dipropylamine (1) |
| U111 | 621-64-7 | Di-n-propylnitrosamine |
| U041 | 106-89-8 | Epichlorohydrin |
| U001 | 75-07-0 | Ethanal (1) |
| U404 | 121-44-8 | Ethanamine, N,N-diethyl- |
| U174 | 55-18-5 | Ethanamine, N-ethyl-N-nitroso- |
| U155 | 91-80-5 | 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'- (2-thienylmethyl)- |
| U067 | 106-93-4 | Ethane, 1,2-dibromo- |
| U076 | 75-34-3 | Ethane, 1,1-dichloro- |
| U077 | 107-06-2 | Ethane, 1,2-dichloro- |
| U131 | 67-72-1 | Ethane, hexachloro- |
| U024 | 111-91-1 | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro- |
| U117 | 60-29-7 | Ethane, 1,1'-oxybis-(I) |
| U025 | 111-44-4 | Ethane, 1,1'-oxybis[2-chloro- |
| U184 | 76-01-7 | Ethane, pentachloro- |
| U208 | 630-20-6 | Ethane, 1,1,1,2-tetrachloro- |

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| U209 | 79-34-5 | Ethane, 1,1,2,2-tetrachloro- |
| U218 | 62-55-5 | Ethanethioamide |
| U226 | 71-55-6 | Ethane, 1,1,1-trichloro- |
| U227 | 79-00-5 | Ethane, 1,1,2-trichloro- |
| U410 | 59669-26-0 | Ethanimidothioic acid, N,N'- [thiobis [(methylimino)carbonyloxy__bis-, dimethyl ester |
| U394 | 30558-43-1 | Ethanimidothioic acid, 2-(dimethylamino)-N- hydroxy-2-oxo-, methyl ester. |
| U359 | 110-80-5 | Ethanol, 2-ethoxy- |
| U173 | 1116-54-7 | Ethanol, 2,2'-(nitrosoimino)bis- |
| U395 | 5952-26-1 | Ethanol, 2,2 -oxybis-, dicarbamate. |
| U004 | 98-86-2 | Ethanone, 1-phenyl- |
| U043 | 75-01-4 | Ethene, chloro- |
| U042 | 110-75-8 | Ethene, (2-chloroethoxy)- |
| U078 | 75-35-4 | Ethene, 1,1-dichloro- |
| U079 | 156-60-5 | Ethene, 1,2-dichloro-, (E)- |
| U210 | 127-18-4 | Ethene, tetrachloro- |
| U228 | 79-01-6 | Ethene, trichloro- |
| U112 | 141-78-6 | Ethyl acetate (I) |
| U113 | 140-88-5 | Ethyl acrylate (I) |
| U238 | 51-79-6 | Ethyl carbamate (urethane) |
| U117 | 60-29-7 | Ethyl ether (I) |
| U114 | n1 111-54-6 | Ethylenebisdithiocarbamic acid, salts & esters |
| U067 | 106-93-4 | Ethylene dibromide |
| U077 | 107-06-2 | Ethylene dichloride |
| U359 | 110-80-5 | Ethylene glycol monoethyl ether |

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| U115 | 75-21-8 | Ethylene oxide (I,T) |
| U116 | 96-45-7 | Ethylenethiourea |
| U076 | 75-34-3 | Ethylidene dichloride |
| U118 | 97-63-2 | Ethyl methacrylate |
| U119 | 62-50-0 | Ethyl methanesulfonate |
| U120 | 206-44-0 | Fluoranthene |
| U122 | 50-00-0 | Formaldehyde |
| U123 | 64-18-6 | Formic acid (C,T) |
| U124 | 110-00-9 | Furan (I) |
| U125 | 98-01-1 | 2-Furancarboxaldehyde (I) |
| U147 | 108-31-6 | 2,5-Furandione |
| U213 | 109-99-9 | Furan, tetrahydro-(I) |
| U125 | 98-01-1 | Furfural (I) |
| U124 | 110-00-9 | Furfuran (I) |
| U206 | 18883-66-4 | Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D- |
| U206 | 18883-66-4 | D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)- carbonyl]amino]- |
| U126 | 765-34-4 | Glycidylaldehyde |
| U163 | 70-25-7 | Guanidine, N-methyl-N'-nitro-N-nitroso- |
| U127 | 118-74-1 | Hexachlorobenzene |
| U128 | 87-68-3 | Hexachlorobutadiene |
| U130 | 77-47-4 | Hexachlorocyclopentadiene |
| U131 | 67-72-1 | Hexachloroethane |
| U132 | 70-30-4 | Hexachlorophene |
| U243 | 1888-71-7 | Hexachloropropene |

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| U133 | 302-01-2 | Hydrazine (R,T) |
| U086 | 1615-80-1 | Hydrazine, 1,2-diethyl- |
| U098 | 57-14-7 | Hydrazine, 1,1-dimethyl- |
| U099 | 540-73-8 | Hydrazine, 1,2-dimethyl- |
| U109 | 122-66-7 | Hydrazine, 1,2-diphenyl- |
| U134 | 7664-39-3 | Hydrofluoric acid (C,T) |
| U134 | 7664-39-3 | Hydrogen fluoride (C,T) |
| U135 | 7783-06-4 | Hydrogen sulfide |
| U135 | 7783-06-4 | Hydrogen sulfide H ₂ S |
| U096 | 80-15-9 | Hydroperoxide, 1-methyl-1-phenylethyl- (R) |
| U116 | 96-45-7 | 2-Imidazolidinethione |
| U137 | 193-39-5 | Indeno[1,2,3-cd]pyrene |
| U190 | 85-44-9 | 1,3-Isobenzofurandione |
| U140 | 78-83-1 | Isobutyl alcohol (I,T) |
| U141 | 120-58-1 | Isosafrole |
| U142 | 143-50-0 | Kepone |
| U143 | 303-34-4 | Lasiocarpine |
| U144 | 301-04-2 | Lead acetate |
| U146 | 1335-32-6 | Lead, bis(acetato-O)tetrahydroxytri- |
| U145 | 7446-27-7 | Lead phosphate |
| U146 | 1335-32-6 | Lead subacetate |
| U129 | 58-89-9 | Lindane |
| U163 | 70-25-7 | MNNG |
| U147 | 108-31-6 | Maleic anhydride |
| U148 | 123-33-1 | Maleic hydrazide |

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| U149 | 109-77-3 | Malononitrile |
| U150 | 148-82-3 | Melphalan |
| U151 | 7439-97-6 | Mercury |
| U152 | 126-98-7 | Methacrylonitrile (I, T) |
| U092 | 124-40-3 | Methanamine, N-methyl- (I) |
| U029 | 74-83-9 | Methane, bromo- |
| U045 | 74-87-3 | Methane, chloro- (I, T) |
| U046 | 107-30-2 | Methane, chloromethoxy- |
| U068 | 74-95-3 | Methane, dibromo- |
| U080 | 75-09-2 | Methane, dichloro- |
| U075 | 75-71-8 | Methane, dichlorodifluoro- |
| U138 | 74-88-4 | Methane, iodo- |
| U119 | 62-50-0 | Methanesulfonic acid, ethyl ester |
| U211 | 56-23-5 | Methane, tetrachloro- |
| U153 | 74-93-1 | Methanethiol (I, T) |
| U225 | 75-25-2 | Methane, tribromo- |
| U044 | 67-66-3 | Methane, trichloro- |
| U121 | 75-69-4 | Methane, trichlorofluoro- |
| U036 | 57-74-9 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro- 2,3,3a,4,7,7a-hexahydro- |
| U154 | 67-56-1 | Methanol (I) |
| U155 | 91-80-5 | Methapyrilene |
| U142 | 143-50-0 | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- |
| U247 | 72-43-5 | Methoxychlor |
| U154 | 67-56-1 | Methyl alcohol (I) |

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| U029 | 74-83-9 | Methyl bromide |
| U186 | 504-60-9 | 1-Methylbutadiene (I) |
| U045 | 74-87-3 | Methyl chloride (I,T) |
| U156 | 79-22-1 | Methyl chlorocarbonate (I,T) |
| U226 | 71-55-6 | Methyl chloroform |
| U157 | 56-49-5 | 3-Methylcholanthrene |
| U158 | 101-14-4 | 4,4'-Methylenebis(2-chloroaniline) |
| U068 | 74-95-3 | Methylene bromide |
| U080 | 75-09-2 | Methylene chloride |
| U159 | 78-93-3 | Methyl ethyl ketone (MEK) (I,T) |
| U160 | 1338-23-4 | Methyl ethyl ketone peroxide (R,T) |
| U138 | 74-88-4 | Methyl iodide |
| U161 | 108-10-1 | Methyl isobutyl ketone (I) |
| U162 | 80-62-6 | Methyl methacrylate (I,T) |
| U161 | 108-10-1 | 4-Methyl-2-pentanone (I) |
| U164 | 56-04-2 | Methylthiouracil |
| U010 | 50-07-7 | Mitomycin C |
| U059 | 20830-81-3 | 5,12-Naphthacenedione, 8-acetyl-10- [(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopy ranosyl) oxy-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-meth oxy-(8S-cis)- |
| U167 | 134-32-7 | 1-Naphthalenamine |
| U168 | 91-59-8 | 2-Naphthalenamine |
| U026 | 494-03-1 | Naphthalenamine, N,N'-bis(2-chloroethyl)- |
| U165 | 91-20-3 | Naphthalene |
| U047 | 91-58-7 | Naphthalene, 2-chloro- |
| U166 | 130-15-4 | 1,4-Naphthalenedione |

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| U236 | 72-57-1 | 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'- dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis [5-amino-4-hydroxy]-, tetrasodium salt |
| U279 | 63-25-2 | 1-Naphthalenol, methylcarbamate. |
| U166 | 130-15-4 | 1,4-Naphthoquinone |
| U167 | 134-32-7 | alpha -Naphthylamine |
| U168 | 91-59-8 | beta-Naphthylamine |
| U217 | 10102-45-1 | Nitric acid, thallium(1+) salt |
| U169 | 98-95-3 | Nitrobenzene (I,T) |
| U170 | 100-02-7 | p-Nitrophenol |
| U171 | 79-46-9 | 2-Nitropropane (I,T) |
| U172 | 924-16-3 | N-Nitrosodi-n-butylamine |
| U173 | 1116-54-7 | N-Nitrosodiethanolamine |
| U174 | 55-18-5 | N-Nitrosodiethylamine |
| U176 | 759-73-9 | N-Nitroso-N-ethylurea |
| U177 | 684-93-5 | N-Nitroso-N-methylurea |
| U178 | 615-53-2 | N-Nitroso-N-methylurethane |
| U179 | 100-75-4 | N-Nitrosopiperidine |
| U180 | 930-55-2 | N-Nitrosopyrrolidine |
| U181 | 99-55-8 | 5-Nitro-o-toluidine |
| U193 | 1120-71-4 | 1,2-Oxathiolane, 2,2-dioxide |
| U058 | 50-18-0 | 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide |
| U115 | 75-21-8 | Oxirane (I,T) |
| U126 | 765-34-4 | Oxiranecarboxyaldehyde |
| U041 | 106-89-8 | Oxirane, (chloromethyl)- |

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| U182 | 123-63-7 | Paraldehyde |
| U183 | 608-93-5 | Pentachlorobenzene |
| U184 | 76-01-7 | Pentachloroethane |
| U185 | 82-68-8 | Pentachloronitrobenzene (PCNB) |
| F027 | 87-86-5 | Pentachlorophenol |
| U161 | 108-10-1 | Pentanol, 4-methyl- |
| U186 | 504-60-9 | 1,3-Pentadiene (I) |
| U187 | 62-44-2 | Phenacetin |
| U188 | 108-95-2 | Phenol |
| U048 | 95-57-8 | Phenol, 2-chloro- |
| U039 | 59-50-7 | Phenol, 4-chloro-3-methyl- |
| U081 | 120-83-2 | Phenol, 2,4-dichloro- |
| U082 | 87-65-0 | Phenol, 2,6-dichloro- |
| U089 | 56-53-1 | Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)- |
| U101 | 105-67-9 | Phenol, 2,4-dimethyl- |
| U052 | 1319-77-3 | Phenol, methyl- |
| U132 | 70-30-4 | Phenol, 2,2'-methylenebis[3,4,6-trichloro- |
| U411 | 114-26-1 | Phenol, 2-(1-methylethoxy)-, methylcarbamate |
| U170 | 100-02-7 | Phenol, 4-nitro- |
| See F027 | 87-86-5 | Phenol, pentachloro- |
| See F027 | 58-90-2 | Phenol, 2,3,4,6-tetrachloro- |
| See F027 | 95-95-4 | Phenol, 2,4,5-trichloro- |
| See | 88-06-2 | Phenol, 2,4,6-trichloro- |

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| F027 | | |
| U150 | 148-82-3 | L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- |
| U145 | 7446-27-7 | Phosphoric acid, lead(2+) salt (2:3) |
| U087 | 3288-58-2 | Phosphorodithioic acid, O,O-diethyl S-methyl ester |
| U189 | 1314-80-3 | Phosphorus sulfide (R) |
| U190 | 85-44-9 | Phthalic anhydride |
| U191 | 109-06-8 | 2-Picoline |
| U179 | 100-75-4 | Piperidine, 1-nitroso- |
| U192 | 23950-58-5 | Pronamide |
| U194 | 107-10-8 | 1-Propanamine (I,T) |
| U111 | 621-64-7 | 1-Propanamine, N-nitroso-N-propyl- |
| U110 | 142-84-7 | 1-Propanamine, N-propyl- (I) |
| U066 | 96-12-8 | Propane, 1,2-dibromo-3-chloro- |
| U083 | 78-87-5 | Propane, 1,2-dichloro- |
| U149 | 109-77-3 | Propanedinitrile |
| U171 | 79-46-9 | Propane, 2-nitro- (I,T) |
| U027 | 108-60-1 | Propane, 2,2'-oxybis[2-chloro- |
| U193 | 1120-71-4 | 1,3-Propane sultone |
| See F027 | 93-72-1 | Propanoic acid, 2-(2,4,5-trichlorophenoxy)- |
| U235 | 126-72-7 | 1-Propanol, 2,3-dibromo-, phosphate (3:1) |
| U140 | 78-83-1 | 1-Propanol, 2-methyl- (I,T) |
| U002 | 67-64-1 | 2-Propanone (I) |
| U007 | 79-06-1 | 2-Propenamide |
| U084 | 542-75-6 | 1-Propene, 1,3-dichloro- |

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| U243 | 1888-71-7 | 1-Propene, 1,1,2,3,3,3-hexachloro- |
| U009 | 107-13-1 | 2-Propenenitrile |
| U152 | 126-98-7 | 2-Propenenitrile, 2-methyl- (I,T) |
| U008 | 79-10-7 | 2-Propenoic acid (I) |
| U113 | 140-88-5 | 2-Propenoic acid, ethyl ester (I) |
| U118 | 97-63-2 | 2-Propenoic acid, 2-methyl-, ethyl ester |
| U162 | 80-62-6 | 2-Propenoic acid, 2-methyl-, methyl ester (I,T) |
| U373 | 122-42-9 | Propham. |
| U411 | 114-26-1 | Propoxur. |
| U387 | 52888-80-9 | Prosulfocarb. |
| U194 | 107-10-8 | n-Propylamine (I,T) |
| U083 | 78-87-5 | Propylene dichloride |
| U148 | 123-33-1 | 3,6-Pyridazinedione, 1,2-dihydro- |
| U196 | 110-86-1 | Pyridine |
| U191 | 109-06-8 | Pyridine, 2-methyl- |
| U237 | 66-75-1 | 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo- |
| U164 | 56-04-2 | |
| U180 | 930-55-2 | Pyrrolidine, 1-nitroso- |
| U200 | 50-55-5 | Reserpine |
| U201 | 108-46-3 | |
| U202 | fn1 81-07-2 | Saccharin, & salts |
| U203 | 94-59-7 | Safrole |
| U204 | 7783-00-8 | Selenious acid |
| U204 | 7783-00-8 | Selenium dioxide |

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| U205 | 7488-56-4 | Selenium sulfide |
| U205 | 7488-56-4 | Selenium sulfide SeS ₂ (R,T) |
| U015 | 115-02-6 | L-Serine, diazoacetate (ester) |
| See F027 | 93-72-1 | Silvex (2,4,5-TP) |
| U206 | 18883-66-4 | Streptozotocin |
| U103 | 77-78-1 | Sulfuric acid, dimethyl ester |
| U189 | 1314-80-3 | Sulfur phosphide (R) |
| See F027 | 93-76-5 | 2,4,5-T |
| U207 | 95-94-3 | 1,2,4,5-Tetrachlorobenzene |
| U208 | 630-20-6 | 1,1,1,2-Tetrachloroethane |
| U209 | 79-34-5 | 1,1,2,2-Tetrachloroethane |
| U210 | 127-18-4 | Tetrachloroethylene |
| See F027 | 58-90-2 | 2,3,4,6-Tetrachlorophenol |
| U213 | 109-99-9 | Tetra hydrofuran (I) |
| U214 | 563-68-8 | Thallium(I) acetate |
| U215 | 6533-73-9 | Thallium(I) carbonate |
| U216 | 7791-12-0 | Thallium(I) chloride |
| U216 | 7791-12-0 | Thallium chloride TlCl |
| U217 | 10102-45-1 | Thallium(I) nitrate |
| U218 | 62-55-5 | Thioacetamide |
| U410 | 59669-26-0 | Thiodicarb. |
| U153 | 74-93-1 | Thiomethanol (I,T) |
| U244 | 137-26-8 | Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl- |

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| U409 | 23564-05-8 | Thiophanate-methyl. |
| U219 | 62-56-6 | Thiourea |
| U244 | 137-26-8 | Thiram |
| U220 | 108-88-3 | Toluene |
| U221 | 25376-45-8 | Toluenediamine |
| U223 | 26471-62-5 | Toluene diisocyanate (R,T) |
| U328 | 95-53-4 | o-Toluidine |
| U353 | 106-49-0 | p-Toluidine |
| U222 | 636-21-5 | o-Toluidine hydrochloride |
| U389 | 2303-17-5 | Triallate. |
| U011 | 61-82-5 | 1H-1,2,4-Triazol-3-amine |
| U227 | 79-00-5 | 1,1,2-Trichloroethane |
| U228 | 79-01-6 | Trichloroethylene |
| U121 | 75-69-4 | Trichloromonofluoromethane |
| See F027 | 95-95-4 | 2,4,5-Trichlorophenol |
| See F027 | 88-06-2 | 2,4,6-Trichlorophenol |
| U404 | 121-44-8 | Triethylamine. |
| U234 | 99-35-4 | 1,3,5-Trinitrobenzene (R,T) |
| U182 | 123-63-7 | 1,3,5-Trioxane, 2,4,6-trimethyl- |
| U235 | 126-72-7 | Tris(2,3-dibromopropyl) phosphate |
| U236 | 72-57-1 | Trypan blue |
| U237 | 66-75-1 | Uracil mustard |
| U176 | 759-73-9 | Urea, N-ethyl-N-nitroso- |
| U177 | 684-93-5 | Urea, N-methyl-N-nitroso- |

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| U043 | 75-01-4 | Vinyl chloride |
| U248 | n1 81-81-2 | Warfarin, & salts, when present at concentrations of 0.3% or less |
| U239 | 1330-20-7 | Xylene (I) |
| U200 | 50-55-5 | Yohimban-16-carboxylic acid, 11,17-dimethoxy-18- [(3,4,5-trimethoxybenzoyl) oxy]-, methyl ester,(3beta,16beta,17alpha,18beta,20alpha)- |
| U249 | 1314-84-7 | Zinc phosphide Z[3]P[2], when present at concentrations of 10% or less |

Section 3 - CARCINOGEN CHEMICALS

National Toxicology Program 13th Report on Carcinogens

Known to be Human Carcinogens

- Aflatoxins
- Alcoholic Beverage Consumption
- 4-Aminobiphenyl
- Analgesic Mixtures Containing Phenacetin (see Phenacetin and Analgesic Mixtures Containing Phenacetin)
- Aristolochic Acids
- Arsenic and Inorganic Arsenic Compounds
- Asbestos
- Azathioprine
- Benzene
- Benzidine (see Benzidine and Dyes Metabolized to Benzidine)
- Beryllium and Beryllium Compounds
- Bis(chloromethyl) Ether and Technical-Grade Chloromethyl Methyl Ether
- 1,3-Butadiene
- 1,4-Butanediol Dimethanesulfonate
- Cadmium and Cadmium Compounds
- Chlorambucil
- 1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea (see Nitrosourea Chemotherapeutic Agents)
- Chromium Hexavalent Compounds
- Coal Tars and Coal-Tar Pitches
- Coke-Oven Emissions
- Cyclophosphamide
- Cyclosporin A
- Diethylstilbestrol
- Dyes Metabolized to Benzidine (Benzidine Dye Class) (see Benzidine and Dyes Metabolized to Benzidine)
- Erionite
- Estrogens, Steroidal
- Ethylene Oxide
- Formaldehyde
- Hepatitis B Virus
- Hepatitis C Virus
- Human Papillomaviruses: Some Genital-Mucosal Types
- Melphalan
- Methoxsalen with Ultraviolet A Therapy

- Mineral Oils: Untreated and Mildly Treated
- Mustard Gas
- 2-Naphthylamine
- Neutrons (see Ionizing Radiation)
- Nickel Compounds (see Nickel Compounds and Metallic Nickel)
- Radon (see Ionizing Radiation)
- Silica, Crystalline (Respirable Size)
- Solar Radiation (see Ultraviolet Radiation Related Exposures)
- Soots
- Strong Inorganic Acid Mists Containing Sulfuric Acid
- Sunlamps or Sunbeds, Exposure to (see Ultraviolet Radiation Related Exposures)
- Tamoxifen
- 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin
- Thiotepa
- Thorium Dioxide (see Ionizing Radiation)
- Tobacco Smoke, Environmental (see Tobacco-Related Exposures)
- Tobacco Smoking (see Tobacco-Related Exposures)
- Tobacco, Smokeless (see Tobacco-Related Exposures)
- *o*-Toluidine
- Ultraviolet Radiation, Broad-Spectrum (see Ultraviolet Radiation Related Exposures)
- Vinyl Chloride (see Vinyl Halides [selected])
- Wood Dust
- X-Radiation and Gamma Radiation (see Ionizing Radiation)

Reasonably Anticipated To Be Human Carcinogens

- Acetaldehyde
- 2-Acetylaminofluorene
- Acrylamide
- Acrylonitrile
- Adriamycin
- 2-Aminoanthraquinone
- *o*-Aminoazotoluene
- 1-Amino-2,4-dibromoanthraquinone
- 2-Amino-3,4-dimethylimidazo[4,5-*f*]quinoline (see Heterocyclic Amines [Selected])
- 2-Amino-3,8-dimethylimidazo[4,5-*f*]quinoxaline (see Heterocyclic Amines [Selected])
- 1-Amino-2-methylantraquinone
- 2-Amino-3-methylimidazo[4,5-*f*]quinoline (see Heterocyclic Amines [Selected])
- 2-Amino-1-methyl-6-phenylimidazo[4,5-*b*]pyridine (see Heterocyclic Amines [Selected])
- Amitrole
- *o*-Anisidine and Its Hydrochloride
- Azacitidine
- Basic Red 9 Monohydrochloride
- Benz[*a*]anthracene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Benzo[*b*]fluoranthene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Benzo[*j*]fluoranthene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Benzo[*k*]fluoranthene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Benzo[*a*]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Benzotrichloride
- 2,2-Bis(bromomethyl)-1,3-propanediol (Technical Grade)

- Bis(chloroethyl) Nitrosourea (see Nitrosourea Chemotherapeutic Agents)
- Bromodichloromethane
- 1-Bromopropane
- Butylated Hydroxyanisole
- Captafol
- Carbon Tetrachloride
- Ceramic Fibers (Respirable Size)
- Chloramphenicol
- Chlorendic Acid
- Chlorinated Paraffins (C₁₂, 60% Chlorine)
- Chloroform
- 1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (see Nitrosourea Chemotherapeutic Agents)
- 3-Chloro-2-methylpropene
- 4-Chloro-*o*-phenylenediamine
- Chloroprene
- *p*-Chloro-*o*-toluidine and Its Hydrochloride
- Chlorozotocin (see Nitrosourea Chemotherapeutic Agents)
- Cisplatin
- Cobalt Sulfate
- Cobalt–Tungsten Carbide: Powders and Hard Metals
- *p*-Cresidine
- Cumene
- Cupferron
- Dacarbazine
- Danthron
- 2,4-Diaminoanisole Sulfate
- 2,4-Diaminotoluene
- Diazoaminobenzene
- Dibenz[*a,h*]acridine (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Dibenz[*a,j*]acridine (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Dibenz[*a,h*]anthracene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- 7H-Dibenzo[*c,g*]carbazole (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Dibenzo[*a,e*]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Dibenzo[*a,h*]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Dibenzo[*a,i*]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Dibenzo[*a,l*]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane
- 2,3-Dibromo-1-propanol
- 1,4-Dichlorobenzene
- 3,3'-Dichlorobenzidine and Its Dihydrochloride
- Dichlorodiphenyltrichloroethane
- 1,2-Dichloroethane
- Dichloromethane
- 1,3-Dichloropropene (Technical Grade)
- Diepoxybutane
- Diesel Exhaust Particulates
- Di(2-ethylhexyl) Phthalate
- Diethyl Sulfate
- Diglycidyl Resorcinol Ether
- 3,3'-Dimethoxybenzidine (see 3,3'-Dimethoxybenzidine and Dyes Metabolized to 3,3'-Dimethoxybenzidine)
- 4-Dimethylaminoazobenzene
- 3,3'-Dimethylbenzidine (see 3,3'-Dimethylbenzidine and Dyes Metabolized to 3,3'-Dimethylbenzidine)
- Dimethylcarbamoyl Chloride
- 1,1-Dimethylhydrazine
- Dimethyl Sulfate
- Dimethylvinyl Chloride

- 1,6-Dinitropyrene (see Nitroarenes [Selected])
- 1,8-Dinitropyrene (see Nitroarenes [Selected])
- 1,4-Dioxane
- Disperse Blue 1
- Dyes Metabolized to 3,3'-Dimethoxybenzidine (3,3'-Dimethoxybenzidine Dye Class) (see 3,3'-Dimethoxybenzidine and Dyes Metabolized to 3,3'-Dimethoxybenzidine)
- Dyes Metabolized to 3,3'-Dimethylbenzidine (3,3'-Dimethylbenzidine Dye Class) (see 3,3'-Dimethylbenzidine and Dyes Metabolized to 3,3'-Dimethylbenzidine)
- Epichlorohydrin
- Ethylene Thiourea
- Ethyl Methanesulfonate
- Furan
- Glass Wool Fibers (Inhalable), Certain
- Glycidol
- Hexachlorobenzene
- Hexachloroethane
- Hexamethylphosphoramide
- Hydrazine and Hydrazine Sulfate
- Hydrazobenzene
- Indeno[1,2,3-*cd*]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- Iron Dextran Complex
- Isoprene
- Kepone
- Lead and Lead Compounds
- Lindane, Hexachlorocyclohexane (Technical Grade), and Other Hexachlorocyclohexane Isomers
- 2-Methylaziridine
- 5-Methylchrysene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)
- 4,4'-Methylenebis(2-chloroaniline)
- 4,4'-Methylenebis(*N,N*-dimethyl)benzenamine
- 4,4'-Methylenedianiline and Its Dihydrochloride
- Methyleugenol
- Methyl Methanesulfonate
- *N*-Methyl-*N'*-Nitro-*N*-Nitrosoguanidine (see *N*-Nitrosamines: 15 Listings)
- Metronidazole
- Michler's Ketone
- Mirex
- Naphthalene
- Nickel, Metallic (see Nickel Compounds and Metallic Nickel)
- Nitrilotriacetic Acid
- *o*-Nitroanisole
- Nitrobenzene
- 6-Nitrochrysene (see Nitroarenes [Selected])
- Nitrofen
- Nitrogen Mustard Hydrochloride
- Nitromethane
- 2-Nitropropane
- 1-Nitropyrene (see Nitroarenes [Selected])
- 4-Nitropyrene (see Nitroarenes [Selected])
- *N*-Nitrosodi-*n*-butylamine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrosodiethanolamine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrosodiethylamine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrosodimethylamine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrosodi-*n*-propylamine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitroso-*N*-ethylurea (see *N*-Nitrosamines: 15 Listings)
- 4-(*N*-Nitrosomethylamino)-1-(3-pyridyl)-1-butanone (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitroso-*N*-methylurea (see *N*-Nitrosamines: 15 Listings)

- *N*-Nitrosomethylvinylamine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrosomorpholine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrosornicotine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrosopiperidine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrosopyrrolidine (see *N*-Nitrosamines: 15 Listings)
- *N*-Nitrososarcosine (see *N*-Nitrosamines: 15 Listings)
- *o*-Nitrotoluene
- Norethisterone
- Ochratoxin A
- 4,4'-Oxydianiline
- Oxymetholone
- Pentachlorophenol and By-products of Its Synthesis
- Phenacetin (see Phenacetin and Analgesic Mixtures Containing Phenacetin)
- Phenazopyridine Hydrochloride
- Phenolphthalein
- Phenoxybenzamine Hydrochloride
- Phenytoin and Phenytoin Sodium
- Polybrominated Biphenyls
- Polychlorinated Biphenyls
- Procarbazine and Its Hydrochloride
- Progesterone
- 1,3-Propane Sultone
- β -Propiolactone
- Propylene Oxide
- Propylthiouracil
- Reserpine
- Riddelliine
- Safrole
- Selenium Sulfide
- Streptozotocin (see Nitrosoarea Chemotherapeutic Agents)
- Styrene
- Styrene-7,8-oxide
- Sulfallate
- Tetrachloroethylene
- Tetrafluoroethylene
- Tetranitromethane
- Thioacetamide
- 4,4'-Thiodianiline
- Thiourea
- Toluene Diisocyanates
- Toxaphene
- Trichloroethylene
- 2,4,6-Trichlorophenol
- 1,2,3-Trichloropropane
- Tris(2,3-dibromopropyl) Phosphate
- Ultraviolet Radiation A (see Ultraviolet Radiation Related Exposures)
- Ultraviolet Radiation B (see Ultraviolet Radiation Related Exposures)
- Ultraviolet Radiation C (see Ultraviolet Radiation Related Exposures)
- Urethane
- Vinyl Bromide (see Vinyl Halides [Selected])
- 4-Vinyl-1-cyclohexene Diepoxide
- Vinyl Fluoride (see Vinyl Halides [Selected])

Section 4 - EXEMPTIONS TO THE NIH GUIDELINES

The NIH Guidelines specify practice for handling and constructing recombinant DNA molecules and organisms and viruses containing recombinant DNA molecules. The following pages have been copied from the NIH guideline to assist in identification of exempt experiments. Refer to the most recent NIH Guidelines and federal register for the most up-to-date information.

http://oba.od.nih.gov/oba/rac/Guidelines/NIH_Guidelines.htm

Section III-F. Exempt Experiments

The following recombinant or synthetic nucleic acid molecules are exempt from the *NIH Guidelines* and registration with the Institutional Biosafety Committee is not required; however, other federal and state standards of biosafety may still apply to such research (for example, the Centers for Disease Control and Prevention (CDC)/NIH publication *Biosafety in Microbiological and Biomedical Laboratories*).

Section III-F-1. Those synthetic nucleic acids that: (1) can neither replicate nor generate nucleic acids that can replicate in any living cell (e.g., oligonucleotides or other synthetic nucleic acids that do not contain an origin of replication or contain elements known to interact with either DNA or RNA polymerase), and (2) are not designed to integrate into DNA, and (3) do not produce a toxin that is lethal for vertebrates at an LD50 of less than 100 nanograms per kilogram body weight. If a synthetic nucleic acid is deliberately transferred into one or more human research participants and meets the criteria of Section III-C, it is not exempt under this Section.

Section III-F-2. Those that are not in organisms, cells, or viruses and that have not been modified or manipulated (e.g., encapsulated into synthetic or natural vehicles) to render them capable of penetrating cellular membranes.

Section III-F-3. Those that consist solely of the exact recombinant or synthetic nucleic acid sequence from a single source that exists contemporaneously in nature.

Section III-F-4. Those that consist entirely of nucleic acids from a prokaryotic host, including its indigenous plasmids or viruses when propagated only in that host (or a closely related strain of the same species), or when transferred to another host by well-established physiological means.

Section III-F-5. Those that consist entirely of nucleic acids from a eukaryotic host including its chloroplasts, mitochondria, or plasmids (but excluding viruses) when propagated only in that host (or a closely related strain of the same species).

Section III-F-6. Those that consist entirely of DNA segments from different species that exchange DNA by known physiological processes, though one or more of the segments may be a synthetic equivalent. A list of such exchangers will be prepared and periodically revised by the

NIH Director with advice of the RAC after appropriate notice and opportunity for public comment (see Section IV-C-1-b-(1)-(c), *Major Actions*). See Appendices A-I through A-VI, *Exemptions under Section III-F-6--Sublists of Natural Exchangers*, for a list of natural exchangers that are exempt from the *NIH Guidelines*.

Section III-F-7. Those genomic DNA molecules that have acquired a transposable element, provided the transposable element does not contain any recombinant and/or synthetic DNA.

Section III-F-8. Those that do not present a significant risk to health or the environment (see Section IV-C-1-b-(1)-(c), *Major Actions*), as determined by the NIH Director, with the advice of the RAC, and following appropriate notice and opportunity for public comment. See Appendix C, *Exemptions under Section III-F-8* for other classes of experiments which are exempt from the *NIH Guidelines*.

Section 5

SELECT/RESTRICTED AGENTS

The following list is compiled utilizing information from the Department of Health and Human Services (DHHS) and the Department of Agriculture Regulatory Guidelines. As mandated under the Public Health Security and Bioterrorism preparedness and Response Act the use of any on or more of these agents requires a notification be sent to the Center for Disease Control and Prevention (CDC).

Additional Information:

- 7CFR 331 (Severe Threat to Plant Health or Marketability)
http://ecfr.gpoaccess.gov/cgi/t/text/textidx?c=ecfr&tpl=/ecfrbrowse/Title07/7cfr331_main_02.tpl
- 9CFR 121(Overlap Agents which pose a threat to human and animal health)
http://ecfr.gpoaccess.gov/cgi/t/text/textidx?c=ecfr&tpl=/ecfrbrowse/Title09/9cfr121_main_02.tpl
- 42 CFR 72 (CDC select agents and overlap agents)
http://grants.nih.gov/grants/policy/select_agent/42CFR_Additional_Requirements.pdf

HHS SELECT AGENTS AND TOXINS

<http://www.selectagents.gov/Select%20Agents%20and%20Toxins%20List.html>

Abrin

Botulinum neurotoxins

Botulinum neurotoxin producing species of
Clostridium

Cercopithecine herpesvirus 1 (Herpes B virus)

Clostridium perfringens epsilon toxin

Coccidioides posadasii/Coccidioides immitis

Conotoxins
Coxiella burnetii
 Crimean-Congo haemorrhagic fever virus
 Diacetoxyscirpenol
 Eastern Equine Encephalitis virus
 Ebola virus
Francisella tularensis
 Lassa fever virus
 Marburg virus
 Monkeypox virus
 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
Rickettsia rickettsii
 Saxitoxin
 Shiga-like ribosome inactivating proteins
 Shigatoxin

South American Haemorrhagic Fever
 viruses

 Flexal
 Guanarito
 Junin
 Machupo
 Sabia

 Staphylococcal enterotoxins
 T-2 toxin
 Tetrodotoxin
 Tick-borne encephalitis complex (flavi)
 viruses

 Central European Tick-borne encephalitis
 Far Eastern Tick-borne encephalitis
 Kyasanur Forest disease
 Omsk Hemorrhagic Fever
 Russian Spring and Summer encephalitis

 Variola major virus (Smallpox virus)
 Variola minor virus (Alastrim)
Yersinia pestis

USDA/HHS Overlap Agents and Toxins

http://www.aphis.usda.gov/programs/ag_selectagent/ag_bioterr_toxinlist.shtml

- *Bacillus anthracis*
- *Brucella abortus*
- *Brucella melitensis*
- *Brucella suis*
- *Burkholderia mallei*
- *Burkholderia pseudomallei*
- Hendra virus
- Nipah virus
- Rift Valley fever virus
- Venezuelan equine encephalitis virus

USDA High Consequence Livestock Pathogens and Toxins

<http://webdoc.nyumc.org/nyumc/files/redaf/attachments/Fed-Agent%20list%209-09.pdf>

| | |
|---|--|
| African Horse Sickness Virus | Lumpy Skin Disease Virus |
| African Swine Fever Virus | Malignant Catarrhal Fever Virus |
| Akabane Virus | Menangle Virus |
| Avian Influenza Virus (Highly Pathogenic) | Mycoplasma Capricolum/M>F>38/M |
| Blue Tongue Virus (Exotic) | Mycoides Capri (Contagious Bovine Pleuropneumonia agent) |
| Bovine Spongiform Encephalopathy Agent | Newcastle Disease Virus |
| Camel Pox Virus | Nipah Virus |
| Classical Swine Fever Virus | Peste Des Petits Ruminants Virus |
| Cowdria Ruminantium (Heartwater) | Rinderpest Virus |
| Foot and Mouth Disease Virus | Sheep Pox Virus |
| Goat Pox Virus | Swine Vesicular Disease Virus |
| Japanese Encephalitis Virus | Vehicular Stomatitis Virus |

Section 6 - DEPARTMENT OF HOMELAND SECURITY CHEMICALS OF INTEREST LIST (COI)

On November 2, 2007, the Department of Homeland Security (DHS) released a final list of 300 chemicals that, if a facility possesses in certain quantities, triggers a requirement for an assessment, known as Top Screen, to be completed. DHS uses top screens to determine whether the facility should be regulated as a high-level risk.

<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=65889784a49874d0c06df97bf085acaa&rgn=div5&view=text&node=6:1.0.1.1.10&idno=6>

To determine the type and quantity of chemicals that will be subject to the preliminary screening process, DHS examined the following three security issues:

1. Release – quantities of toxic, flammable, or explosive chemicals that have the potential to create significant adverse consequences for human life or health if intentionally released or

detonated;

2. Theft and diversion – chemicals that have the potential, if stolen or diverted, to be used or converted into weapons; and

3. Sabotage and contamination – chemicals that, if mixed with other readily available materials, have the potential to create significant adverse consequences for human life or health.

The department identified these chemicals in the specific amounts for preliminary screening based on their potential to create significant human life or health consequences.

College and University Laboratories

All facilities that possess chemicals listed in Appendix A in quantities at or above the STQs will have to complete and submit a Top-Screen. The Appendix A requirements for Top-Screen may require colleges and universities to comply

Chemicals of Interest List

| |
|----------------------------------|
| Acetaldehyde |
| Acetone cyanohydrin, stabilized |
| Acetyl bromide |
| Acetyl chloride |
| Acetyl iodide |
| Acetylene |
| Acrolein |
| Acrylonitrile |
| Acrylyl chloride |
| Allyl alcohol |
| Allylamine |
| Allyltrichlorosilane, stabilized |
| Aluminum (powder) |
| Aluminum bromide, anhydrous |
| Aluminum chloride, anhydrous |
| Aluminum phosphide |

| |
|--|
| Ammonia (anhydrous) |
| Ammonia (conc. 20% or greater) |
| 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] |
| Ammonium nitrate, solid [nitrogen concentration of 23% nitrogen or greater] |
| Ammonium perchlorate |
| Ammonium picrate |
| Amyltrichlorosilane |
| Antimony pentafluoride |
| Arsenic trichloride |
| Arsine |
| Barium azide |
| 1,4-Bis(2-chloroethylthio)-nbutane |

| |
|--|
| Bis(2-chloroethylthio)methane |
| Bis(2-chloroethylthiomethyl)ether |
| 1,5-Bis(2-chloroethylthio)-npentane |
| 1,3-Bis(2-chloroethylthio)-npropane |
| Boron tribromide |
| Boron trichloride |
| Boron trifluoride |
| Boron trifluoride compound with methyl ether (1:1) |
| Bromine |
| Bromine chloride |
| Bromine pentafluoride |
| Bromine trifluoride |
| Bromotrifluorethylene |
| 1,3-Butadiene |
| Butane |
| Butene |
| 1-Butene |
| 2-Butene |
| 2-Butene-cis |
| 2-Butene-trans |
| Butyltrichlorosilane |
| Calcium hydrosulfite |
| Calcium phosphide |
| Carbon disulfide |
| Carbon oxysulfide |

| |
|----------------------------------|
| Carbonyl fluoride |
| Carbonyl sulfide |
| Chlorine |
| Chlorine dioxide |
| Chlorine monoxide |
| Chlorine pentafluoride |
| Chlorine trifluoride |
| Chloroacetyl chloride |
| 2-Chloroethylchloromethylsulfide |
| Chloroform |
| Chloromethyl ether |
| Chloromethyl methyl ether |
| 1-Chloropropylene |
| 2-Chloropropylene |
| Chlorosarin |
| Chlorosoman |
| Chlorosulfonic acid |
| Chromium oxychloride |
| Crotonaldehyde |
| Crotonaldehyde, (E)- |
| Cyanogen |
| Cyanogen chloride |
| Cyclohexylamine |
| Cyclohexyltrichlorosilane |

| |
|--|
| Cyclopropane |
| DF |
| Diazodinitrophenol |
| Diborane |
| Dichlorosilane |
| N,N-(2-diethylamino)ethanethiol |
| Diethyldichlorosilane |
| o,o-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate |
| Diethyleneglycol dinitrate |
| Diethyl methylphosphonite |
| N,N-Diethyl phosphoramidic dichloride |
| N,N-(2-diisopropylamino)ethanethiol N,N-diisopropyl-(beta)-aminoethane thiol |
| Difluoroethane |
| N,N-Diisopropyl phosphoramidic dichloride |
| 1,1-Dimethylhydrazine |
| Dimethylamine |
| N,N-(2-dimethylamino)ethanethiol |
| Dimethyldichlorosilane |
| N,N-Dimethyl phosphoramidic dichloride Dimethylphosphoramidodichloridate |
| 2,2-Dimethylpropane |

| |
|--|
| Dingu |
| Dinitrogen tetroxide |
| Dinitrophenol |
| Dinitroresorcinol |
| Diphenyldichlorosilane |
| Dipicryl sulfide |
| Dipicrylamine [or] Hexyl |
| N,N-(2-dipropylamino)ethanethiol |
| N,N-Dipropyl phosphoramidic dichloride |
| Dodecyltrichlorosilane |
| Epichlorohydrin |
| Ethane |
| Ethyl acetylene |
| Ethyl chloride |
| Ethyl ether |
| Ethyl mercaptan |
| Ethyl nitrite |
| Ethyl phosphonyl difluoride |
| Ethylamine |
| Ethyldiethanolamine |
| Ethylene |
| Ethylene oxide |
| Ethylenediamine |
| Ethyleneimine |
| Ethylphosphonothioic dichloride |

| |
|--|
| Ethyltrichlorosilane |
| Fluorine |
| Fluorosulfonic acid |
| Formaldehyde (solution) |
| Furan |
| Germane |
| Germanium tetrafluoride |
| Guanyl nitrosaminoguanylidene hydrazine |
| Hexaethyl tetraphosphate and compressed gas mixtures |
| Hexafluoroacetone |
| Hexanitrostilbene |
| Hexolite |
| Hexyltrichlorosilane |
| HMX |
| HN1 (nitrogen mustard-1) |
| HN2 (nitrogen mustard-2) |
| HN3 (nitrogen mustard-3) |
| Hydrazine |
| Hydrochloric acid (conc. 37% or greater) |
| Hydrocyanic acid |
| Hydrofluoric acid (conc. 50% or greater) |
| Hydrogen |
| Hydrogen bromide (anhydrous) |

| |
|---|
| Hydrogen chloride (anhydrous) |
| Hydrogen cyanide |
| Hydrogen fluoride (anhydrous) |
| Hydrogen iodide, anhydrous |
| Hydrogen peroxide (concentration of at least 35%) |
| Hydrogen selenide |
| Hydrogen sulfide |
| Iodine pentafluoride |
| Iron, pentacarbonyl- |
| Isobutane |
| Isobutyronitrile |
| Isopentane |
| Isoprene |
| Isopropyl chloride |
| Isopropyl chloroformate |
| Isopropylamine |
| Isopropylphosphonothioic dichloride |
| Isopropylphosphonyl difluoride |
| Lead azide |
| Lead styphnate |
| Lewisite 1 |
| Lewisite 2 |
| Lewisite 3 |
| Lithium amide |

| |
|----------------------------------|
| Lithium nitride |
| Magnesium (powder) |
| Magnesium diamide |
| Magnesium phosphide |
| MDEA |
| Mercury fulminate |
| Methacrylonitrile |
| Methane |
| 2-Methyl-1-butene |
| 3-Methyl-1-butene |
| Methyl chloride |
| Methyl chloroformate |
| Methyl ether |
| Methyl formate |
| Methyl hydrazine |
| Methyl isocyanate |
| Methyl mercaptan |
| Methyl thiocyanate |
| Methylamine |
| Methylchlorosilane |
| Methyldichlorosilane |
| Methylphenyldichlorosilane |
| Methylphosphonothioic dichloride |
| 2-Methylpropene |
| Methyltrichlorosilane |

| |
|---------------------------------|
| Sulfur mustard (Mustard gas(H)) |
| O-Mustard (T) |
| Nickel Carbonyl |
| Nitric acid |
| Nitric oxide |
| Nitrobenzene |
| 5-Nitrobenzotriazol |
| Nitrocellulose |
| Nitrogen mustard hydrochloride |
| Nitrogen trioxide |
| Nitroglycerine |
| Nitromannite |
| Nitromethane |
| Nitrostarch |
| Nitrosyl chloride |
| Nitrotriazolone |
| Nonyltrichlorosilane |
| Octadecyltrichlorosilane |
| Octolite |
| Octonal |
| Octyltrichlorosilane |
| Oleum (Fuming Sulfuric acid) |
| Oxygen difluoride |
| 1,3-Pentadiene |
| Pentane |

| |
|--------------------------|
| 1- Pentene |
| 2-Pentene, (E)- |
| 2-Pentene, (Z)- |
| Pentolite |
| Peracetic acid |
| Perchloromethylmercaptan |
| Perchloryl fluoride |
| PETN |
| Phenyltrichlorosilane |
| Phosgene |
| Phosphine |
| Phosphorus |
| Phosphorus oxychloride |
| Phosphorus pentabromide |
| Phosphorus pentachloride |
| Phosphorus pentasulfide |
| Phosphorus trichloride |
| Picrite |
| Piperidine |
| Potassium chlorate |
| Potassium cyanide |
| Potassium nitrate |
| Potassium perchlorate |
| Potassium permanganate |
| Potassium phosphide |

| |
|----------------------------------|
| Propadiene |
| Propane |
| Propionitrile |
| Propyl chloroformate |
| Propylene [1-Propene] |
| Propylene oxide |
| Propyleneimine |
| Propylphosphonothioic dichloride |
| Propylphosphonyl difluoride |
| Propyltrichlorosilane |
| Propyne |
| QL |
| RDX |
| RDX and HMX mixtures |
| Sarin |
| Selenium hexafluoride |
| Sesquimustard |
| Silane |
| Silicon tetrachloride |
| Silicon tetrafluoride |
| Sodium azide |
| Sodium chlorate |
| Sodium cyanide |
| Sodium hydrosulfite |

| |
|----------------------------|
| Sodium nitrate |
| Sodium phosphide |
| Soman |
| Stibine |
| Strontium phosphide |
| Sulfur dioxide (anhydrous) |
| Sulfur tetrafluoride |
| Sulfur trioxide |
| Sulfuryl chloride |
| Tabun |
| Tellurium hexafluoride |
| Tetrafluoroethylene |
| Tetramethyllead |
| Tetramethylsilane |
| Tetranitroaniline |
| Tetranitromethane |
| Tetrazene |
| 1H-Tetrazole |
| Thiodiglycol |
| Thionyl chloride |
| Titanium tetrachloride |
| TNT |
| Torpex |
| Trichlorosilane |

| |
|-------------------------------|
| Triethanolamine |
| Triethanolamine hydrochloride |
| Triethyl phosphate |
| Trifluoroacetyl chloride |
| Trifluorochloroethylene |
| Trimethylamine |
| Trimethylchlorosilane |
| Trimethyl phosphate |
| Trinitroaniline |
| Trinitroanisole |
| Trinitrobenzene |
| Trinitrobenzenesulfonic acid |
| Trinitrobenzoic acid |
| Trinitrochlorobenzene |
| Trinitrofluorenone |
| Trinitro-meta-cresol |
| Trinitronaphthalene |
| Trinitrophenetole |
| Trinitrophenol |
| Trinitroresorcinol |
| Tritonal |
| Tungsten hexafluoride |
| Vinyl acetate monomer |
| Vinyl acetylene |
| Vinyl chloride |

| |
|---------------------|
| Vinyl ethyl ether |
| Vinyl fluoride |
| Vinyl methyl ether |
| Vinylidene chloride |
| Vinylidene fluoride |

| |
|----------------------|
| Vinyltrichlorosilane |
| VX |
| Zinc hydrosulfite |

http://www.dhs.gov/xlibrary/assets/chemsec_appendixa-chemicalofinterestlist.pdf

Section 7 - DEA List I and List II Chemicals

Congress passed the Chemical Diversion and Trafficking Act (CDTA) in 1988 and subsequent amendments placed under control 41 chemicals. These laws provide a system of regulatory controls and criminal sanctions to address both domestic and international diversion of important chemicals without interrupting access to chemicals destined for legitimate commerce. The CDTA created two categories for the controlled chemicals, as follows:

List I and List II Chemicals

| | |
|---|------|
| 1) Anthranilic acid, its esters, and its salts | 8530 |
| (2) Benzyl cyanide | 8735 |
| (3) Ephedrine, its salts, optical isomers, and salts of optical isomers | 8113 |
| (4) Ergonovine and its salts | 8675 |
| (5) Ergotamine and its salts | 8676 |
| (6) N-Acetylanthranilic acid, its esters, and its salts | 8522 |
| (7) Norpseudoephedrine, its salts, optical isomers, and salts of optical isomers | 8317 |
| (8) Phenylacetic acid, its esters, and its salts | 8791 |
| (9) Phenylpropanolamine, its salts, optical isomers, and salts of optical isomers | 1225 |
| (10) Piperidine and its salts | 2704 |
| (11) Pseudoephedrine, its salts, optical isomers, and salts of optical isomers | 8112 |
| (12) 3,4-Methylenedioxyphenyl-2-propanone | 8502 |

| | |
|---|------|
| (13) Methylamine and its salts | 8520 |
| (14) Ethylamine and its salts | 8678 |
| (15) Propionic anhydride | 8328 |
| (16) Isosafrole | 8704 |
| (17) Safrole | 8323 |
| (18) Piperonal | 8750 |
| (19) N-Methylephedrine, its salts, optical isomers, and salts of optical isomers (N-Methylephedrine) | 8115 |
| (20) N-Methylpseudoephedrine, its salts, optical isomers, and salts of optical isomers | 8119 |
| (21) Hydriodic Acid | 6695 |
| (22) Benzaldehyde | 8256 |
| (23) Nitroethane | 6724 |
| (24) Gamma-Butyrolactone (Other names include: GBL; Dihydro-2 (3H)-furanone; 1,2-Butanolide; 1,4-Butanolide; 4-Hydroxybutanoic acid lactone; gamma-hydroxybutyric acid lactone) | 2011 |
| (25) Red Phosphorus | 6795 |
| (26) White phosphorus (Other names: Yellow Phosphorus) | 6796 |
| (27) Hypophosphorous acid and its salts (including ammonium hypophosphite, calcium hypophosphite, iron hypophosphite, potassium hypophosphite manganese hypophosphite magnesium hypophosphite and sodium hypophosphite) | 6797 |
| (28) N-phenethyl-4-piperidone (NPP) | 8332 |
| (29) Iodine | 6699 |
| (30) Ergocristine and its salts | 8612 |

(b) List II chemicals:

| | |
|--|------|
| (1) Acetic anhydride | 8519 |
| (2) Acetone | 6532 |
| (3) Benzyl chloride | 8570 |
| (4) Ethyl ether | 6584 |
| (5) Potassium permanganate | 6579 |
| (6) 2-Butanone (or Methyl Ethyl Ketone or MEK) | 6714 |
| (7) Toluene | 6594 |

| | |
|---|------|
| (8) Hydrochloric acid (including anhydrous hydrogen chloride) | 6545 |
| (9) Sulfuric acid | 6552 |
| (10) Methyl Isobutyl Ketone (MIBK) | 6715 |
| (11) Sodium Permanganate | |

http://www.deadiversion.usdoj.gov/chem_prog/34chems.htm

Section 8 - LIST OF EXPLOSIVES

DEPARTMENT OF JUSTICE, Bureau of Alcohol, Tobacco, Firearms, and Explosive publishes and revises annually in the Federal Register a list of explosives determined to be within the coverage of 18 U.S.C. 841 *et seq.* Below is the list for 2013

A

Acetylides of heavy metals.

Aluminum containing polymeric propellant.

Aluminum ophorite explosive.

Amatex. Amatol.

Ammonal.

Ammonium nitrate explosive mixtures (cap sensitive).

*Ammonium nitrate explosive mixtures (non-cap sensitive).

Ammonium perchlorate having particle size less than 15 microns.

Ammonium perchlorate explosive mixtures (excluding ammonium perchlorate composite propellant (APCP)).

Ammonium picrate [picrate of ammonia, Explosive D].

Ammonium salt lattice with isomorphously substituted inorganic salts.

*ANFO [ammonium nitrate-fuel oil].

Aromatic nitro-compound explosive mixtures.

Azide explosives.

B

Baranol.

Baratol.

BEAF [1,2-bis (2,2-difluoro-2-nitroacetoxyethane)].

Black powder.

Black powder based explosive mixtures.

Black powder substitutes.

*Blasting agents, nitro-carbo-nitrates, including non-cap sensitive slurry and water gel explosives.

Blasting caps.

Blasting gelatin.

Blasting powder.

BTNEC [bis (trinitroethyl) carbonate]. BTNEN [bis (trinitroethyl) nitramine]. BTTN [1,2,4 butanetriol trinitrate]. Bulk salutes.

Butyl tetryl.

C

Calcium nitrate explosive mixture. Cellulose hexanitrate explosive mixture.

Chlorate explosive mixtures.

Composition A and variations. Composition B and variations. Composition C and variations. Copper acetylide.

Cyanuric triazide.

Cyclonite [RDX].

Cyclotetramethylenetetranitramine

[HMX].

Cyclotol. Cyclotrimethylenetrinitramine [RDX].

D

DATB [diaminotrinitrobenzene]. DDNP [diazodinitrophenol].

DEGDN [diethyleneglycol dinitrate].

Detonating cord.

Detonators.

Dimethylol dimethyl methane dinitrate composition.

Dinitroethyleneurea.

Dinitroglycerine [glycerol dinitrate].

Dinitrophenol.
Dinitrophenolates.
Dinitrophenyl hydrazine.
Dinitroresorcinol.
Dinitrotoluene-sodium nitrate explosive mixtures.
DIPAM [dipicramide; diaminohexanitrobiphenyl].
Dipicryl sulfone.
Dipicrylamine.
Display fireworks.
DNPA [2,2-dinitropropyl acrylate].
DNPD [dinitropentano nitrile].
Dynamite.

E

EDDN [ethylene diamine dinitrate].
EDNA [ethylenedinitramine].
Ednatol.
EDNP [ethyl 4,4-dinitropentanoate].
EGDN [ethylene glycol dinitrate].
Erythritol tetranitrate explosives.
Esters of nitro-substituted alcohols.
Ethyl-tetryl.
Explosive conitrates.
Explosive gelatins.
Explosive liquids.
Explosive mixtures containing oxygen-releasing inorganic salts and hydrocarbons.
Explosive mixtures containing oxygen-releasing inorganic salts and nitro bodies.

Explosive mixtures containing oxygen-releasing inorganic salts and water insoluble fuels.

Explosive mixtures containing oxygen-releasing inorganic salts and water soluble fuels.

Explosive mixtures containing sensitized nitromethane.

Explosive mixtures containing tetranitromethane (nitroform).

Explosive nitro compounds of aromatic hydrocarbons.

Explosive organic nitrate mixtures.

Explosive powders.

F

Flash powder.

Fulminate of mercury.

Fulminate of silver.

Fulminating gold.

Fulminating mercury.

Fulminating platinum.

Fulminating silver.

G

Gelatinized nitrocellulose.

Gem-dinitro aliphatic explosive mixtures.

Guanyl nitrosamino guanyl tetrazene.

Guanyl nitrosamino guanylidene hydrazine.

Guncotton.

H

Heavy metal azides.

Hexanite.

Hexanitrodiphenylamine.

Hexanitrostilbene.

Hexogen [RDX].

Hexogene or octogene and a nitrated N-methylaniline.

Hexolites.

HMTD[hexamethylenetriperoxidediamine]

HMX [cyclo-1,3,5,7-tetramethylene 2,4,6,8-tetranitramine; Octogen].

Hydrazinium nitrate/hydrazine/ aluminum explosive system.

Hydrazoic acid.

I

Igniter cord.

Igniters.

Initiating tube systems.

K

KDNBF [potassium dinitrobenzo- furoxane].

L

Lead azide.

Lead mannite.

Lead mononitroresorcinate.

Lead picrate.

Lead salts, explosive.

Lead styphnate [styphnate of lead, lead trinitroresorcinate].

Liquid nitrated polyol and trimethylolethane.

Liquid oxygen explosives.

M

Magnesium ophorite explosives.

Mannitol hexanitrate.

MDNP [methyl 4,4-dinitropentanoate].

MEAN [monoethanolamine nitrate].

Mercuric fulminate.

Mercury oxalate.

Mercury tartrate.

Metriol trinitrate.

Minol-2 [40% TNT, 40% ammonium nitrate, 20% aluminum].

MMAN [monomethylamine nitrate];methylamine nitrate.

Mononitrotoluene-nitroglycerin mixture.

Monopropellants.

N

NIBTN [nitroisobutametriol trinitrate].

Nitrate explosive mixtures.

Nitrate sensitized with gelled nitroparaffin.

Nitrated carbohydrate explosive.

Nitrated glucoside explosive.

Nitrated polyhydric alcohol explosives.

Nitric acid and a nitro aromatic compound explosive.

Nitric acid and carboxylic fuel explosive.

Nitric acid explosive mixtures.

Nitro aromatic explosive mixtures.

Nitro compounds of furane explosive mixtures.

Nitrocellulose explosive.

Nitroderivative of urea explosive mixture.

Nitrogelatin explosive.

Nitrogen trichloride.

Nitrogen tri-iodide.

Nitroglycerine [NG, RNG, nitro, glyceryl trinitrate, trinitroglycerine].

Nitroglycide.

Nitroglycol [ethylene glycol dinitrate,

EGDN].Nitroguanidine explosives.

Nitronium perchlorate propellant mixtures.

Nitroparaffins Explosive Grade and ammonium nitrate mixtures.

Nitrostarch.

Nitro-substituted carboxylic acids.

Nitrourea.

O

Octogen [HMX].

Octol [75 percent HMX, 25 percent TNT].

Organic amine nitrates.

Organic nitramines.

P

PBX [plastic bonded explosives].

Pellet powder.

Penthrinite composition.

Pentolite.

Perchlorate explosive mixtures.

Peroxide based explosive mixtures.

PETN [nitropentaerythrite, pentaerythrite tetranitrate, pentaerythritol tetranitrate].

Picramic acid and its salts.

Picramide.

Picrate explosives.

Picrate of potassium explosive mixtures.

Picratol.

Picric acid (manufactured as an explosive).

Picryl chloride.

Picryl fluoride.

PLX [95% nitromethane, 5% ethylenediamine].

Polynitro aliphatic compounds.

Polyolpolynitrate-nitrocellulose explosive gels.

Potassium chlorate and lead sulfocyanate explosive.

Potassium nitrate explosive mixtures.

Potassium nitroaminotetrazole.

Pyrotechnic compositions.

PYX [2,6-bis(picrylamino)] 3,5- dinitropyridine.

R

RDX [cyclonite, hexogen, T4, cyclo-

1,3,5,-trimethylene-2,4,6,- trinitramine; hexahydro-1,3,5-trinitro- S-triazine].

S

Safety fuse.

Salts of organic amino sulfonic acid
explosive mixture.

Salutes (bulk).

Silver acetylide.

Silver azide.

Silver fulminate.

Silver oxalate explosive mixtures.

Silver styphnate.

Silver tartrate explosive mixtures.

Silver tetrazene.

Slurried explosive mixtures of water, inorganic oxidizing salt, gelling agent, fuel, and sensitizer (cap sensitive).

Smokeless powder.

Sodatol.

Sodium amatol.

Sodium azide explosive mixture.

Sodium dinitro-ortho-cresolate.

Sodium nitrate explosive mixtures.

Sodium nitrate-potassium nitrate explosive mixture.

Sodium picramate.

Special fireworks.

Squibs.

Styphnic acid explosives.

T

Tacot [tetranitro-2,3,5,6-dibenzo- 1,3a,4,6a tetrazapentalene].

TATB [triaminotrinitrobenzene].

TATP [triacetonetriperoxide].

TEGDN [triethylene glycol dinitrate].

Tetranitrocarbazole.

Tetrazene [tetracene, tetrazine, 1(5-tetrazolyl)-4-guanyl tetrazene hydrate].

Tetrazole explosives.

Tetryl [2,4,6 tetranitro-N-methylaniline].

Tetrytol.

Thickened inorganic oxidizer salt slurried explosive mixture.

TMETN [trimethylolethane trinitrate].

TNEF [trinitroethyl formal].
TNEOC [trinitroethylorthocarbonate].
TNEOF [trinitroethylorthoformate].
TNT [trinitrotoluene, trotyl, trilit, triton].
Torpex.
Tridite.
Trimethylol ethyl methane trinitrate composition.
Trimethylolthane trinitrate-nitrocellulose.
Trimonite
Trinitroanisole.
Trinitrobenzene.
Trinitrobenzoic acid.
Trinitrocresol.
Trinitro-meta-cresol.
Trinitronaphthalene.
Trinitrophenetol.
Trinitrophloroglucinol.
Trinitroresorcinol.
Tritonal.

U

Urea nitrate.

<http://www.gpo.gov/fdsys/pkg/FR-2013-10-28/pdf/2013-25370.pdf>