

CHEMICALS OF INTEREST

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The Department of Homeland Security, Appendix to Chemical Facility Anti-Terrorism Standard, requires the University to complete the below inventory of identified **Chemicals of Interest** (COI). Please complete the list by filling the **column D** (Total Volume) for the chemicals you have in **all your laboratories**, not by individual lab, THEN **YOU MUST SAVE THE FILE TO YOUR COMPUTER BEFORE SENDING** to ehs@med.miami.edu. If you have any questions or concerns, please call our EHS office at 305-243-3268 (Mr. Vaughan Munro) or 305-243-3269 (Mr. Jairo Betancourt)

Chemical Of Interest	Synonym	Total Volume per P.I. (Kilograms , Milliliters etc...)
Acetaldehyde		
Acetone cyanohydrin, stabilized		
Acetyl bromide		
Acetyl chloride		
Acetyl iodide		
Acetylene	[Ethyne]	
Acrolein	[2-Propenal] or Acrylaldehyde	
Acrylonitrile	[2-Propenenitrile]	
Acrylyl chloride	[2-Propenoyl chloride]	
Allyl alcohol	[2-Propen-1-ol]	
Allylamine	[2-Propen-1-amine]	
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	[Arsenous trichloride]	
Arsine		
Barium azide		
1,4-Bis(2-chloroethylthio)-n-butane		
Bis(2-chloroethylthio)methane		
Bis(2-chloroethylthiomethyl)ether		
1,5-Bis(2-chloroethylthio)-n-pentane		
1,3-Bis(2-chloroethylthio)-n-propane		
Boron tribromide		
Boron trichloride	[Borane, trichloro]	
Boron trifluoride	[Borane, trifluoro]	
Boron trifluoride compound with methyl ether (1:1)	[Boron, trifluoro [oxybis (methane)],T-4]	
Bromine		
Bromine chloride		
Bromine pentafluoride		
Bromine trifluoride		
Bromotrifluoroethylene	[Ethene, bromotrifluoro-]	
1,3-Butadiene		
Butane		
Butene		
1-Butene		
2-Butene		
2-Butene-cis		
2-Butene-trans	[2-Butene, (E)]	
Butyltrichlorosilane		
Calcium hydrosulfite	[Calcium dithionite]	
Calcium phosphide		
Carbon disulfide		
Carbon oxysulfide	[Carbon oxide sulfide (COS); carbonyl sulfide]	
Carbonyl fluoride		
Carbonyl sulfide		

Chemical Of Interest	Synonym	Total Volume per P.I. (Kilograms , Milliliters etc...)
Chlorine		
Chlorine dioxide	[Chlorine oxide, (ClO ₂)]	
Chlorine monoxide	[Chlorine oxide]	
Chlorine pentafluoride		
Chlorine trifluoride		
Chloroacetyl chloride		
2-Chloroethylchloro-methylsulfide		
Chloroform	[Methane, trichloro-]	
Chloromethyl ether	[Methane, oxybis(chloro-)]	
Chloromethyl methyl ether	[Methane, chloromethoxy-]	
1-Chloropropylene	[1-Propene, 1-chloro-]	
2-Chloropropylene	[1-Propene, 2-chloro-]	
Chlorosarin	[o-Isopropyl methylphosphonochloridate]	
Chlorosoman	[o-Pinacolyl methylphosphonochloridate]	
Chlorosulfonic acid		
Chromium oxychloride		
Crotonaldehyde	[2-Butenal]	
Crotonaldehyde, (E)-	[2-Butenal], (E)-]	
Cyanogen	[Ethanedinitrile]	
Cyanogen chloride		
Cyclohexylamine	[Cyclohexanamine]	
Cyclohexyltrichlorosilane		
Cyclopropane		
DF	Methyl phosphonyl difluoride	
Diazodinitrophenol		
Diborane		
Dichlorosilane	[Silane, dichloro-]	
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	[Ethane, 1,1-difluoro-]	
N,N-Diisopropyl phosphoramidic dichloride		
1,1-Dimethylhydrazine	[Hydrazine, 1, 1-dimethyl-]	
Dimethylamine	[Methanamine, N-methyl-]	
N,N-(2-dimethylamino)ethanethiol		
Dimethyldichlorosilane	[Silane, dichlorodimethyl-]	
N,N-Dimethyl phosphoramidic dichloride	[Dimethylphosphoramido-dichloridate]	
2,2-Dimethylpropane	[Propane, 2,2-dimethyl-]	
Dingu	[Dinitroglycoluril]	
Dinitrogen tetroxide		
Dinitrophenol		
Dinitroresorcinol		
Diphenyldichlorosilane		
Dipicryl sulfide		
Dipicrylamine [or] Hexyl	[Hexanitrodiphenylamine]	
N,N-(2-dipropylamino)ethanethiol		
N,N-Dipropyl phosphoramidic dichloride		
Dodecyltrichlorosilane		
Epichlorohydrin	[Oxirane, (chloromethyl)-]	
Ethane		
Ethyl acetylene	[1-Butyne]	
Ethyl chloride	[Ethane, chloro-]	
Ethyl ether	[Ethane, 1,1-oxybis-]	
Ethyl mercaptan	[Ethanethiol]	
Ethyl nitrite	[Nitrous acid, ethyl ester]	
Ethyl phosphonyl difluoride		
Ethylamine	[Ethanamine]	
Ethyldiethanolamine		
Ethylene	[Ethene]	
Ethylene oxide	[Oxirane]	
Ethylenediamine	[1,2-Ethanediamine]	
Ethyleneimine	[Aziridine]	
Ethylphosphonothioic dichloride		
Ethyltrichlorosilane		

Chemical Of Interest	Synonym	Total Volume per P.I. (Kilograms , Milliliters etc...)
Fluorine		
Fluorosulfonic acid		
Formaldehyde (solution)		
Furan		
Germane		
Germanium tetrafluoride		
Guanyl nitrosaminoguanylidene hydrazine		
Hexaethyl tetraphosphate and compressed gas mixtures		
Hexafluoroacetone		
Hexanitrostilbene		
Hexolite	[Hexotol]	
Hexyltrichlorosilane		
HMX	[Cyclotetramethylene-tetranitramine]	
HN1 (nitrogen mustard-1)	[Bis(2-chloroethyl)ethylamine]	
HN2 (nitrogen mustard-2)	[Bis(2-chloroethyl)methylamine]	
HN3 (nitrogen mustard-3)	[Tris(2-chloroethyl)amine]	
Hydrazine		
Hydrochloric acid (conc. 37% or greater)		
Hydrocyanic acid		
Hydrofluoric acid (conc. 50% or greater)		
Hydrogen		
Hydrogen bromide (anhydrous)		
Hydrogen chloride (anhydrous)		
Hydrogen cyanide	[Hydrocyanic acid]	
Hydrogen fluoride (anhydrous)		
Hydrogen iodide, anhydrous		
Hydrogen peroxide (concentration of at least 35%)		
Hydrogen selenide		
Hydrogen sulfide		
Iodine pentafluoride		
Iron, pentacarbonyl-	[Iron carbonyl (Fe (CO)5), (TB5-11)-]	
Isobutane	[Propane, 2-methyl]	
Isobutyronitrile	[Propanenitrile, 2-methyl-]	
Isopentane	[Butane, 2-methyl-]	
Isoprene	[1,3-Butadiene, 2-methyl-]	
Isopropyl chloride	[Propane, 2-chloro-]	
Isopropyl chloroformate	[Carbonochloridic acid, 1-methylethyl ester]	
Isopropylamine	[2-Propanamine]	
Isopropylphosphonothioic dichloride		
Isopropylphosphonyl difluoride		
Lead azide		
Lead styphnate	[Lead trinitroresorcinate]	
Lewisite 1	[2-Chlorovinylchloroarsine]	
Lewisite 2	[Bis(2-chlorovinyl)chloroarsine]	
Lewisite 3	[Tris(2-chlorovinyl)arsine]	
Lithium amide		
Lithium nitride		
Magnesium (powder)		
Magnesium diamide		
Magnesium phosphide		
MDEA	[Methyldiethanolamine]	
Mercury fulminate		
Methacrylonitrile	[2-Propenenitrile, 2-methyl-]	
Methane		
2-Methyl-1-butene		
3-Methyl-1-butene		
Methyl chloride	[Methane, chloro-]	
Methyl chloroformate	[Carbonochloridic acid, methyl ester]	
Methyl ether	[Methane, oxybis-]	
Methyl formate	[Formic acid Methyl ester]	
Methyl hydrazine	[Hydrazine, methyl-]	
Methyl isocyanate	[Methane, isocyanato-]	
Methyl mercaptan	[Methanethiol]	
Methyl thiocyanate	[Thiocyanic acid, methyl ester]	
Methylamine	[Methanamine]	
Methylchlorosilane		
Methyldichlorosilane		
Methylphenyldichlorosilane		

Chemical Of Interest	Synonym	Total Volume per P.I. (Kilograms , Milliliters etc...)
Methylphosphonothioic dichloride		
2-Methylpropene	[1-Propene, 2-methyl-]	
Methyltrichlorosilane	[Silane, trichloromethyl-]	
Sulfur mustard (Mustard gas (H))	[Bis(2-chloroethyl)sulfide]	
O-Mustard (T)	[Bis(2-chloroethylthioethyl)ether]	
Nickel Carbonyl		
Nitric acid		
Nitric oxide	[Nitrogen oxide (NO)]	
Nitrobenzene		
5-Nitrobenzotriazol		
Nitrocellulose		
Nitrogen mustard hydrochloride	[Bis(2-chloroethyl)methylamine hydrochloride]	
Nitrogen trioxide		
Nitroglycerine		
Nitromannite	[Mannitol hexanitrate, wetted]	
Nitromethane		
Nitrostarch		
Nitrosyl chloride		
Nitrotriazolone		
Nonyltrichlorosilane		
Octadecyltrichlorosilane		
Octolite		
Octonal		
Octyltrichlorosilane		
Oleum (Fuming Sulfuric acid)	[Sulfuric acid, mixture with sulfur trioxide]	
Oxygen difluoride		
1,3-Pentadiene		
Pentane		
1- Pentene		
2-Pentene, (E)-		
2-Pentene, (Z)-		
Pentolite		
Peracetic acid	[Ethaneperoxic acid]	
Perchloromethylmercaptan	[Methanesulfenyl chloride, trichloro-]	
Perchloryl fluoride		
PETN	[Pentaerythritol tetranitrate]	
Phenyltrichlorosilane		
Phosgene	[Carbonic dichloride] or [carbonyldichloride]	
Phosphine		
Phosphorus		
Phosphorus oxychloride	[Phosphoryl chloride]	
Phosphorus pentabromide		
Phosphorus pentachloride		
Phosphorus pentasulfide		
Phosphorus trichloride		
Picrite	[Nitroguanidine]	
Piperidine		
Potassium chlorate		
Potassium cyanide		
Potassium nitrate		
Potassium perchlorate		
Potassium permanganate		
Potassium phosphide		
Propadiene	[1,2-Propadiene]	
Propane		
Propionitrile	[Propanenitrile]	
Propyl chloroformate	[Carbonchloridic acid, propylester]	
Propylene	[1-Propene]	
Propylene oxide	[Oxirane, methyl-]	
Propyleneimine	[Aziridine, 2-methyl-]	
Propylphosphonothioic dichloride		
Propylphosphonyl difluoride		
Propyltrichlorosilane		
Propyne	[1-Propyne]	
QL	[o-Ethyl-o-2-diisopropylaminoethyl methylphosphonite]	
RDX	[Cyclotrimethylenetrinitramine]	
RDX and HMX mixtures		

Chemical Of Interest	Synonym	Total Volume per P.I. (Kilograms , Milliliters etc...)
Sarin	[o-Isopropyl methylphosphonofluoridate]	
Selenium hexafluoride		
Sesquimustard	[1,2-Bis(2-chloroethylthio)ethane]	
Silane		
Silicon tetrachloride		
Silicon tetrafluoride		
Sodium azide		
Sodium chlorate		
Sodium cyanide		
Sodium hydrosulfite	[Sodium dithionite]	
Sodium nitrate		
Sodium phosphide		
Soman	[o-Pinacolyl methylphosphonofluoridate]	
Stibine		
Strontium phosphide		
Sulfur dioxide (anhydrous)		
Sulfur tetrafluoride	[Sulfur fluoride (SF4), (T-4)-]	
Sulfur trioxide		
Sulfuryl chloride		
Tabun	[o-Ethyl-N,N-dimethylphosphoramido-cyanidate]	
Tellurium hexafluoride		
Tetrafluoroethylene	[Ethene, tetrafluoro-]	
Tetramethyllead	[Plumbane, tetramethyl-]	
Tetramethylsilane	[Silane, tetramethyl-]	
Tetranitroaniline		
Tetranitromethane	[Methane, tetranitro-]	
Tetrazene	[Guanyl nitrosaminoguanyltetrazene]	
1H-Tetrazole		
Thiodiglycol	[Bis(2-hydroxyethyl)sulfide]	
Thionyl chloride		
Titanium tetrachloride	[Titanium chloride (TiCl4) (T-4)-]	
TNT	[Trinitrotoluene]	
Torpex	[Hexotonal]	
Trichlorosilane	[Silane, trichloro-]	
Triethanolamine		
Triethanolamine hydrochloride		
Triethyl phosphite		
Trifluoroacetyl chloride		
Trifluorochloroethylene	[Ethene, chlorotrifluoro]	
Trimethylamine	[Methanamine, N,N-dimethyl-]	
Trimethylchlorosilane	[Silane, chlorotrimethyl-]	
Trimethyl phosphite		
Trinitroaniline		
Trinitroanisole		
Trinitrobenzene		
Trinitrobenzenesulfonic acid		
Trinitrobenzoic acid		
Trinitrochlorobenzene		
Trinitrofluorenone		
Trinitro-meta-cresol		
Trinitronaphthalene		
Trinitrophenetole		
Trinitrophenol		
Trinitroresorcinol		
Tritonal		
Tungsten hexafluoride		
Vinyl acetate monomer	[Acetic acid ethenyl ester]	
Vinyl acetylene	[1-Buten-3-yne]	
Vinyl chloride	[Ethene, chloro-]	
Vinyl ethyl ether	[Ethene, ethoxy-]	
Vinyl fluoride	[Ethene, fluoro-]	
Vinyl methyl ether	[Ethene, methoxy-]	
Vinylidene chloride	[Ethene, 1,1-dichloro-]	
Vinylidene fluoride	[Ethene, 1,1-difluoro-]	
Vinyltrichlorosilane		
VX	[o-Ethyl-S-2-diisopropylaminoethyl methyl phosphonothiolate]	
Zinc hydrosulfite	[Zinc dithionite]	