

## **Department of Homeland Security Chemicals of Interest**

On October 4, 2006, President George W Bush signed the Homeland Security Appropriations Act of 2007. This Act gave the Department of Homeland Security (DHS) authority to regulate the security of facilities that contain high risk chemicals. On April 9, 2007, the Department of Homeland Security issued the Chemical Facility Anti-Terrorism Standards (CFATS). Under these standards the University must maintain an inventory of chemicals that are subject to this regulation. The chemicals subject to this regulation are more commonly known as chemicals of interest or COIs.

In order to ensure the University of Northern Iowa remains compliant with this regulation, departments who come into possession of any of the chemicals listed on the following pages must immediately inform the Environmental Health and Safety (EH&S) Office of the name of the chemical or chemicals that were acquired, their respective amounts and storage location. Departments must also submit annual inventories of their chemicals to the EH&S office so an annual review of the amounts of COIs the University has on campus can be completed. If at any time it is found the amount of one or more of the COIs on campus exceeds the regulatory level (designated as threshold quantity by the DHS), the University must submit a report to the Department of Homeland Security (referred to as a "Top-Screen" by the DHS) within 60 days. Failure to report this information could result in fines to the University of \$25,000 per day.

The EH&S Office is responsible for gathering of campus chemical information and for submitting the Top Screen Report to the Department of Homeland Security on behalf of the University.

## DHS Chemicals of Interest

Chemical of Interest	Synonym	CAS
Aluminum powder		7429-90-5
Ammonium nitrate [more than 0.2 % combustible substances including any organic substance calculated as carbon, to the exclusion of any other added substance]		6484-52-2
Ammonium nitrate, solid [nitrogen conc. $\geq 23\%$ ]		6484-52-2
Ammonium perchlorate		7790-98-9
Arsenic trichloride	Arsenous trichloride	7784-34-1
Arsine		7784-42-1
Barium oxide		18810-58-7
1,4-Bis(2-chloroethylthio)-n-butane		142868-93-7
Bis(2-chloroethylthio)methane		63869-13-6
Bis(2-chloroethylthiomethyl)ether		63918-90-1
1,5-Bis(2-chloroethylthio)-n-pentane		142868-94-8
1,3-Bis(2-chloroethylthio)-n-propane		63905-10-2
Boron tribromide		10294-33-4
Boron trichloride	Borane, trichloro	10294-34-5
Boron trifluoride	Borane, trifluoro	7637-07-2
Bromine chloride		13863-41-7
Carbonyl fluoride		353-50-4
Carbonyl sulfide		463-58-1
Chlorine		7782-50-5
Chlorine pentafluoride		13637-63-3
Chlorine trifluoride		7790-91-2
Chlorosarin	[o-Isopropyl methylphosphonochloridate]	1445-76-7
Chlorosoman	[o-Pinacolyl methylphosphonochloridate]	7040-57-5
Cyanogen	[Ethanedinitrile]	460-19-5
Cyanogen chloride		506-77-4
DF	Methyl phosphonyl difluoride	676-99-3
Diazodinitrophenol		87-31-0
Diborane		19287-45-7
Dichlorosilane	[Silane, dichloro-]	4109-96-0
Diethyl methylphosphonite		15715-41-0
Diethyleneglycol dinitrate		693-21-0
Dingu	[Dinitroglycoluril]	55510-04-8
Dinitrogen tetroxide		10544-72-6
Dinitrophenol		25550-58-7
Dinitroresorcinol		519-44-8
Dipicryl sulfide		115937
Dipicrylamine [or] Hexyl	[Hexanitrodiphenylamine]	131-73-7
Ethyl phosphonyl difluoride		753-98-0
Ethyldiethanolamine		139-87-7

Ethylphosphonothioic dichloride		993-43-1
Fluorine		7782-41-4
Germane		7782-65-2
Germanium tetrafluoride		7783-58-6
Guanyl nitrosaminoguanylidene hydrazine		
Hexaethyl tetraphosphate and compressed gas mixtures		757-58-4
Hexafluoroacetone		684-16-2
Hexanitrostilbene		20062-22-0
Hexolite	[Hexotol]	121-82-4
HMX	[Cyclotetramethylene-tetranitramine]	2691-41-0
HN1 (nitrogen mustard-1)	[Bis(2-chloroethyl)ethylamine]	-497270
HN2 (nitrogen mustard-2)	[Bis(2-chloroethyl)methylamine]	51-75-2
HN3 (nitrogen mustard-3)	[Tris(2-chloroethyl)amine]	555-77-1
Hydrogen bromide (anhydrous)		10035-10-6
Hydrogen chloride (anhydrous)		7647-01-0
Hydrogen cyanide	[Hydrocyanic acid]	74-90-8
Hydrogen fluoride (anhydrous)		7664-39-3
Hydrogen iodide, anhydrous		10034-85-2
Hydrogen peroxide (concentration of at least 35%)		7722-84-1
Hydrogen selenide		2148909
Hydrogen sulfide		2148878
Isopropylphosphonothioic dichloride		1498-60-8
Isopropylphosphonyl difluoride		677-42-9
Lead azide		13424-46-9
Lead styphnate	[Lead trinitroresorcinate]	15245-44-0
Lewisite 1	[2-Chlorovinyl dichloroarsine]	541-25-3
Lewisite 2	[Bis(2-chlorovinyl)chloroarsine]	40334-69-8
Lewisite 3	[Tris(2-chlorovinyl)arsine]	40334-70-1
Magnesium (powder)		7439-95-4
MDEA	[Methyldiethanolamine]	105-59-9
Mercury fulminate		628-86-4
Methyl mercaptan	[Methanethiol]	74-93-1
Methylchlorosilane		993-00-0
Methylphosphonothioic dichloride		676-98-2
N,N-(2-diethylamino)ethanethiol		100-38-9
N,N-(2-diisopropylamino)ethanethiol	N,N-diisopropyl-(beta)-aminoethane thiol	1439977
N,N-(2-dimethylamino)ethanethiol		-654482
N,N-(2-dipropylamino)ethanethiol		1439946
N,N-Diethyl phosphoramidic dichloride		1498-54-0
N,N-Diisopropyl phosphoramidic dichloride		23306-80-1
N,N-Dimethyl phosphoramidic dichloride	[Dimethylphosphoramido-dichloridate]	677-43-0
N,N-Dipropyl phosphoramidic dichloride		40881-98-9
Nitric acid		7697-37-2

Nitric oxide	[Nitrogen oxide (NO)]	10102-43-9
Nitrobenzene		98-95-3
Nitrocellulose		9004-70-0
Nitrogen mustard hydrochloride	[Bis(2-chloroethyl)methylamine hydrochloride]	55-86-7
Nitrogen trioxide		10544-73-7
Nitroglycerine		55-63-0
Nitromannite	[Mannitol hexanitrate, wetted]	15825-70-4
Nitromethane		75-52-5
Nitrostarch		9056-38-6
Nitrosyl chloride		2696-92-6
Nitrotriazolone		932-64-9
o,o-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate		78-53-5
Octolite		57607-37-1
Octonal		78413-87-3
O-Mustard (T)	[Bis(2-chloroethylthioethyl)ether]	63918-89-8
Oxygen difluoride		7783-41-7
Pentolite		8066-33-9
Perchloryl fluoride		7616-94-6
PETN	[Pentaerythritol tetranitrate]	28799
Phosgene	[Carbonic dichloride] or [carbonyldichloride]	75-44-5
Phosphine		7803-51-2
Phosphorus		7723-14-0
Phosphorus oxychloride	[Phosphoryl chloride]	10025-87-3
Phosphorus trichloride		2125683
Picrite	[Nitroguanidine]	556-88-7
Potassium chlorate		698078
Potassium nitrate		7757-79-1
Potassium perchlorate		7778-74-7
Potassium permanganate		7722-64-7
Propylphosphonothioic dichloride		227920
Propylphosphonyl difluoride		690-14-2
QL	[o-Ethyl-o-2-diisopropylaminoethyl methylphosphonite]	57856-11-8
RDX	[Cyclotrimethylenetrinitramine]	121-82-4
RDX and HMX mixtures		121-82-4
Sarin	[o-Isopropyl methylphosphonofluoridate]	107-44-8
Selenium hexafluoride		7783-79-1
Sesquimustard	[1,2-Bis(2-chloroethylthio)ethane]	3563-36-8
Silicon tetrafluoride		7783-61-1
Sodium azide		26628-22-8
Sodium chlorate		2146053
Sodium nitrate		7631-99-4

Soman	[o-Pinacolyl methylphosphonofluoridate]	96-64-0
Stibine		7803-52-3
Sulfur dioxide (anhydrous)		2025884
Sulfur mustard (Mustard gas (H))	[Bis(2-chloroethyl)sulfide]	505-60-2
Sulfur tetrafluoride	[Sulfur fluoride (SF <sub>4</sub> ), (T-4)-]	7783-60-0
Tabun	[o-Ethyl-N,N-dimethylphosphoramido-cyanidate]	77-81-6
Tellurium hexafluoride		7783-80-4
Tetranitroaniline		53014-37-2
Tetrazene	[Guanyl nitrosaminoguanyltetrazene]	109-27-3
Thiodiglycol	[Bis(2-hydroxyethyl)sulfide]	111-48-8
Titanium tetrachloride	[Titanium chloride (TiCl <sub>4</sub> ) (T-4)-]	7550-45-0
TNT	[Trinitrotoluene]	118-96-7
Torpex	[Hexotonal]	67713-16-0
Triethanolamine		102-71-6
Triethanolamine hydrochloride		637-39-8
Triethyl phosphite		122-52-1
Trifluoroacetyl chloride		354-32-5
Trifluorochloroethylene	[Ethene, chlorotrifluoro]	79-38-9
Trimethyl phosphite		121-45-9
Trinitroaniline		26952-42-1
Trinitroanisole		606-35-9
Trinitrobenzene		99-35-4
Trinitrobenzenesulfonic acid		2508-19-2
Trinitrobenzoic acid		129-66-8
Trinitrochlorobenzene		88-88-0
Trinitrofluorenone		129-79-3
Trinitro-meta-cresol		602-99-3
Trinitronaphthalene		55810-17-8
Trinitrophenetole		4732-14-3
Trinitrophenol		88-89-1
Trinitroresorcinol		82-71-3
Tritonal		54413-15-9
Tungsten hexafluoride		7783-82-6
VX	[o-Ethyl-S-2-diisopropylaminoethyl methyl phosphonothiolate]	50782-69-9