

Laboratory Hazardous Materials Survey

PI__

Person completing form email: _____

UCSB is required by federal and state law to track certain materials that are particularly hazardous, or in large volumes. Please use the questionnaire below to update your current inventory on file, shown immediately below. Please indicate any changes, additions, or deletions to this form. Return form to EH&S mail or email to chandra.feeseer@ehs.ucsb.edu. Thank you for your assistance.

Lab Room	Chemical Name	Container Size	Units	QTY	State	Container Type
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For each lab room, report whether any of the 7 categories of materials are on hand and include quantity:

1. Large volume chemicals¹ NONE (check)

- “Large” compressed gas cylinders defined as those greater than 3 feet (1 meter) in height: (e.g., hydrogen, nitrogen, etc.)
If not listed above include gases: _____
- Any single liquid chemical exceeding 20 gallons² (75 liters) in total volume: (e.g., acetone, hexane, etc.)

- Any single solid chemical exceeding 50 pounds in total weight: (e.g., silica, etc.) _____

2. OSHA Regulated Carcinogens³ Report if you have any of these specific materials listed below:

(provide quantity & container size)

NONE in this grouping

	QTY	Size		QTY	Size		QTY	Size
Formaldehyde CAS# 50-00-0			4,4'-methylenebis(2-chloroaniline) CAS# 101-14-4			bis-Chloromethylether 542-88-1		
Dichloromethane 75-09-2			4-aminodiphenyl 92-67-1			Dibromochloropropane 96-12-8		
Benzene 71-43-2			4-dimethylaminoazobenzene 60-11-7			Ethylene dibromide 106-93-4		
Arsenic (& its compounds) CAS VARY			4-nitrobiphenyl 92-93-3			Ethylene oxide 75-21-8		
Cadmium (& its compounds) CAS VARY			Acrylonitrile 107-13-1			Ethyleneimine 151-56-4		
Chromium (VI) e.g.,(Na ⁺ ,K ⁺ ,NH ₄ ⁺) dichromate, chromate, chromium trioxide, ...) 7440-47-3 List type:			Benzidine 92-87-5 (and its salts): List type:			Inorganic lead compounds: 7439-92-1 List type:		
1,3-butadiene 106-99-0			alpha-Naphthylamine 134-32-7			Methyl chloromethylether 107-30-2		
2-acetylaminofluorene 53-96-3			beta-Naphthylamine 91-59-8			Methylenedianiline 101-77-9		
3,3-dichlorobenzidine (& its salts) 91-94-1			beta-Propiolactone 57-57-8			N-Nitrosodimethylamine 62-75-9		

3. Class IV Oxidizers: can undergo an explosive reaction when catalyzed by or exposed to heat, shock, or friction

Examples to report: (add quantity and container size)

NONE in this category

	QTY	Size		QTY	Size		QTY	Size
Ammonium perchlorate (particle size >15 microns) 7790-98-9			Ammonium permanganate 13446-10-1			Hydrogen peroxide solutions (>91% conc.)_7722-84-1		
Guanidine nitrate 506-93-4			Perchloric acid_7601-90-3			Tetranitromethane_509-14-8		

4. Class IV Unstable Reactives: react or can become self-reactive when subjected to shock, pressure or temperature

Examples to report: (add quantity and container size)

NONE in this category

	QTY	Size		QTY	Size		QTY	Size
Acetyl peroxide 110-22-5			Ethyl nitrate ₁₀₉₋₉₅₋₅			Picric acid (dry) ₈₈₋₈₉₋₁		
Dibutyl peroxide 223-352-9			Perchloric acid ₇₆₀₁₋₉₀₋₃			Trinitrobenzene ₉₉₋₃₅₋₄		
Dinitrobenzene 99-65-0			Peroxyacetic acid 79-21-0			organic azides: CAS VARY		

5. Class III Water-reactives: react explosively with water without requiring added heat or confinement

or **Pyrophorics:** immediately ignite upon exposure to air. (e.g., organolithium reagents: Alkyls, Alkynyls, others?)

Examples to report: (add quantity and container size)

NONE in this Category

Metals solids (not salts)	QTY	Size	Pyrophoric Liquids:	QTY	Size	Pyrophoric Liquids:	QTY	Size
Lithium 7439-93-2			Diethyl aluminum chloride 96-10-6			Triethyl bismuthine 593-91-9		
Sodium 7440-23-5			Diethyl beryllium 542-63-2			Triethyl boron 593-90-8		
Potassium 7440-09-7			Diethyl phosphine 627-49-6			Trimethylaluminum 75-24-1		
White/yellow phosphorous 7723-14-0			Diethyl zinc 557-20-0			Trimethyl gallium 1445-79-0		
Cesium 7440-46-2			Dimethyl arsine ₅₉₃₋₅₇₋₇			Bromine trifluoride 7787-71-5		
Rubidium, Hafnium			Triethyl aluminum etherate 97-93-8			Bromine pentafluoride 7789-30-2		
Other:			Other:			Other:		
Pyrophoric gases	QTY	Size						
Diborane 19287-45-7								
Phosphine 7803-51-2								
Silane 7803-62-5								

6. Highly Toxic Materials

NONE in this Category

Report if you have any of these Gases⁴: (add quantity and container size)

	QTY	Size		QTY	Size		QTY	Size
Arsine ₇₇₈₄₋₄₂₋₁			Hydrogen cyanide ₇₄₋₉₀₋₈			Nitrogen dioxide ₁₀₁₀₂₋₄₄₋₀		
Boron tribromide 10294-33-4			Hydrogen fluoride ₇₆₆₄₋₃₉₋₃			Ozone ₁₀₀₂₈₋₁₅₋₆		
Chlorine 7782-50-5			Hydrogen selenide ₇₇₈₃₋₀₇₋₅			Phosgene ₇₅₋₄₄₋₅		
Chlorine pentafluoride 13637-63-3			Hydrogen sulfide ₇₇₈₃₋₀₆₋₄			Phosphine ₇₈₀₃₋₅₁₋₂		
Cyanogen ₄₆₀₋₁₉₋₅			Methyl bromide ₇₄₋₈₃₋₉			Phosphorus trichloride 7719-12-2		
Fluorine ⁵ ₇₇₈₂₋₄₁₋₄			Methyl mercaptan ₇₄₋₉₃₋₁			Sulfur tetrafluoride 7783-60-0		
Germane ₉₉₄₋₆₅₋₀			Nitric oxide ₁₀₁₀₂₋₄₃₋₉			Titanium tetrachloride 7550-45-0		

Solids/liquids (Cal/ARP chemicals): (add quantity and container size)

	QTY	Size		QTY	Size		QTY	Size
Nickel carbonyl 13463-39-3			Chromic chloride 10060-12-5			Emetin dihydrochloride 316-42-7		

7. Homeland Security Chemicals of Interest⁶:

NONE (Check if no materials on list)

Reference the following page for a list of Homeland chemicals required to be reported.

Are any of these materials on hand?: (*add quantity and container size*)

Footnotes

- 1) Special chemicals are required to be reported to SB County to assist them in their emergency response and planning duties.
- 2) Some liquids have reporting thresholds in pounds.
- 3) You are permitted to use these materials, but EH&S may need to do a review of usage procedures. OSHA carcinogens are only a small fraction of the generally accepted list of known or suspected human carcinogens. For the more complete list visit EH&S website: <http://ehs.ucsb.edu> then search for Carcinogens.
- 4) Lethal concentration 50% < 200 ppm when administered by continuous inhalation for one hour to test rats.
- 5) Exclude mixtures of approximately 5% fluorine and inert gas for eximer laser systems
- 6) The U.S. Department of Homeland Security regulates additional highly toxic liquids/solids. If you believe you may have one of these materials, please contact EH&S at x-4899 immediately.



Homeland Security: Chemicals of Interest

COMMON LAB CHEMICALS with CAS #	QTY	Size	SOLIDS AND LIQUIDS with CAS #	QTY	Size
Nitric acid >68% 697-37-2 (The common concentration is 70% with lab reagents)			Chlorosoman 7040-57-5		
Aluminum (powder) 7429-90-5			DF (Methyl phosphonyl difluoride) 676-99-3		
Magnesium (powder) 7439-95-4			N,N-(2-diethylamino)ethanethiol 100-38-9		
UNCOMMON LAB CHEMICALS			o,o-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate 78-53-5		
A. Generally stored in compressed gases cylinders, but may be dissolved in a solvents			Diethyl methylphosphonite 15715-41-0		
	QTY	Size	N,N-Diethyl phosphoramidic dichloride 1498-54-0		
Boron trifluoride (gas) 7637-07-2			N,N-(2-diisopropylamino)ethanethiol 5842-07-9		
Bromine chloride (gas) 13863-41-7			N,N-Diisopropyl phosphoramidic dichloride 23306-80-1		
Bromine trifluoride (gas) 7787-71-5			N,N-(2-dimethylamino)ethanethiol 108-02-1		
Carbonyl fluoride (gas) 353-50-4			N,N-Dimethyl phosphoramidic dichloride 677-43-0		
Chlorine trifluoride (gas) 7790-91-2			N,N-(2-dipropylamino)ethanethiol 5842-06-8		
Cyanogen chloride (gas) 506-77-4			N,N-Dipropyl phosphoramidic dichloride 40881-98-9		
Dichlorosilane (gas) 4109-96-0			Ethyl phosphonyl difluoride 753-98-0		
Dinitrogen tetroxide (gas) 10544-72-6			Ethylphosphonothioic dichloride 993-43-1		
Germanium tetrafluoride (gas) 7783-58-6			HN1 (nitrogen mustard-1) 538-07-8		
Hexafluoroacetone (gas) 684-16-2			HN2 (nitrogen mustard-2) 51-75-2		
Nitrogen trioxide (gas) 10544-73-7			HN3 (nitrogen mustard-3) 555-77-1		
Nitrosyl chloride (gas) 2696-92-6			Isopropylphosphonothioic dichloride 1498-60-8		
Oxygen difluoride (gas) 7783-41-7			Isopropylphosphonyl difluoride 677-42-9		
Perchloryl fluoride (gas) 7616-94-6			Lewisite 1 [2-Chlorovinyl]dichloroarsine] 541-25-3		
Selenium hexafluoride (gas) 7783-79-1			Lewisite 2 [Bis(2-chlorovinyl)chloroarsine] 40334-69-8		
Silicon tetrafluoride (gas) 7783-61-1			Lewisite 3 [Tris(2-chlorovinyl)arsine] 40334-70-1		
Stibine (gas) 7803-52-3			Methylchlorosilane 993-00-0		
Tellurium hexafluoride (gas) 7783-80-4			Methylphosphonothioic dichloride 676-98-2		
Trifluoroacetyl chloride (gas) 354-32-5			Sulfur mustard (Mustard gas (H)) 505-60-2		
Tungsten hexafluoride (gas) 7783-82-6			O-Mustard (T) 63918-89-8		
			Nitrogen mustard hydrochloride 55-86-7		
B. SOLIDS AND LIQUIDS	QTY	Size	Phosphorus trichloride		
Arsenic trichloride [Arsenous trichloride]			Propylphosphonothioic dichloride 2524-01-8		
1,4-Bis(2-chloroethylthio)-n-butane 142868-93-7			Propylphosphonyl difluoride 690-14-2		
Bis(2-chloroethylthio)methane 63869-13-6			QL [o-Ethyl-o-2-diisopropylaminoethyl methyl phosphonite] 57856-11-8		
Bis(2-chloroethylthiomethyl)ether 63918-90-1			Sarin [o-Isopropyl methylphosphonofluoridate] 107-44-8		
1,5-Bis(2-chloroethylthio)-n-pentane 142868-94-8			Sesquimustard 3563-36-8		
1,3-Bis(2-chloroethylthio)-n-propane 63905-10-2			Soman 96-64-0		
Boron tribromide 10294-33-4			Tabun 77-81-6		
Chlorine pentafluoride 13637-63-3			Thiodiglycol [Bis(2-hydroxyethyl)sulfide] 111-48-8		
2-Chloroethylchloro-methylsulfide 2625-76-5			Titanium tetrachloride 7550-45-0		
Chlorosarin 1445-76-7			VX [o-Ethyl-S-2-diisopropylaminoethyl methylphosphonothiolate] 50782-69-9		