

List Of Chemicals Requiring EHS Approval Prior To Purchase

MATERIAL TYPE

REASON FOR PURCHASE CONTROL

Cal/OSHA Regulated Carcinogens
(see list attached)

Cal/OSHA regulations 8 CCR 5198-5220 have specific requirements for these materials including: SOPs, training, signage for designated work areas, carcinogen use notification to CalOSHA, air exposure monitoring...

Highly Toxic Gases
(see list attached)

Highly toxic, route of exposure, exposure monitoring, release monitoring and alarm systems...

Radioactive Isotopes

NRC and Radiologic Health Branch License requirements require strict tracking controls, RSO approval, training, exposure monitoring, signage, periodic inspection...

Controlled Substances (Drugs)

DEA requirements require strict tracking, locked storage, periodic inspection...

Human Blood or Unfixed Human Tissue

Written Exposure Control Plan (ECP) required. Bloodborne Pathogen training required.

BioSafety Level 2 or 3 Biohazards

Potentially infectious material. Controls required. Biosafety training required.

Pesticides, Insecticides, etc.

Personal and public exposure concerns require prior approval by EHS

Diethyl Ether > 2L Size Container

Fire Hazard. Handling hazard.

SFSU List of Chemicals Requiring EHS Approval For Purchase:
CalOSHA Regulated Carcinogens

	Chemical	CAS	8CCR
1	1,2-Dibromo-3-Chloropropane (DBCP)	96-12-8	§5212
2	1,3-Butadiene	106-99-0	§5201
3	2-Acetylaminofluorene	53-96-3	§5209
4	3,3'-Dichlorobenzidine (and its salts)	91-94-1	§5209
5	4,4-Methylenebis (2-Chloroaniline)	101-14-4	§5215
6	4-Aminodiphenyl	92-67-1	§5209
7	4-Dimethylaminoazobenzene	60-11-7	§5209
8	4-Nitrobiphenyl	92-93-3	§5209
9	Acrylonitrile*	107-13-1	§5213
10	alpha-Naphthylamine	134-32-7	§5209
11	Asbestos	77536-68-6	§5208
12	Benzene*	71-43-2	§5218
13	Benzidine (and its salts)	92-87-5	§5209
14	Beryllium	7440-41-7	§5205
15	beta-Naphthylamine	91-59-8	§5209
16	beta-Propiolactone	57-57-8	§5209
17	bis-Chloromethyl ether	542-88-1	§5209
18	Cadmium*	543-90-8	§5207
19	Chromium (VI)*	7440-47-3	§5206
20	Coke Oven Emissions	n/a	§5211
21	Ethylene Dibromide (EDB)	106-93-4	§5219
22	Ethylene Oxide	75-21-8	§5220
23	Ethyleneimine	151-56-4	§5209
24	Formaldehyde*	50-00-0	§5217
25	Inorganic Arsenic*	7440-38-2	§5214
26	Inorganic Lead compounds*	7439-92-1	§5198
27	Lead*	7439-92-1	§5198
28	Methyl chloromethyl ether	107-30-2	§5209
29	Methylene chloride*	75-09-2	§5202
30	Methylenedianiline	101-77-9	§5200
31	N-Nitrosodimethylamine	62-75-9	§5209
32	Non Asbestiform Tremolite, Anthophyllite, or Actinolite.		§5208.1
33	Respirable Crystalline Silica		§5204
34	Vinyl Chloride	75-01-4	§5210

* = Currently Present on Campus Inventory

SFSU List of Chemicals Requiring EHS Approval For Purchase:

Highly Toxic Gases

CHEMICAL	CAS	REASON FOR LISTING	Formula
Arsenic pentafluoride	7784-36-3	Highly Toxic Gas	AsF ₅
Arsine	7784-42-1	Highly Toxic Gas	AsH ₃
Bis(trifluoromethyl)peroxide	927-84-4	Highly Toxic Gas	C ₂ F ₆ O ₂
Boron tribromide	10294-33-4	Highly Toxic Gas	BBr ₃
Boron trichloride	10294-34-5	Highly Toxic Gas	BCl ₃
Boron trifluoride	71217637	Highly Toxic Gas	BF ₃
Bromine chloride	13863-41-7	Highly Toxic Gas	BrCl
Bromomethane	74-83-9	Highly Toxic Gas	CH ₃ Br
Carbon monoxide	630-08-0	Highly Toxic Gas	CO
Chlorine	7782-50-5	Highly Toxic Gas	Cl ₂
Chlorine pentafluoride	13637-63-3	Highly Toxic Gas	ClF ₅
Chlorine trifluoride	7790-91-2	Highly Toxic Gas	ClF ₃
Chloropicrin	76-06-2	Highly Toxic Gas	CCl ₃ NO ₂
Cyanogen	460-19-5	Highly Toxic Gas	C ₂ N ₂
Cyanogen chloride	506-77-4	Highly Toxic Gas	CNCl
Diazomethane	334-88-3	Highly Toxic Gas	CH ₂ N ₂
Diborane	19287-45-7	Highly Toxic Gas	B ₂ H ₆
Dichloroacetylene	7572-29-4	Highly Toxic Gas	C ₂ Cl ₂
Dichlorosilane	4109-96-0	Highly Toxic Gas	H ₂ Cl ₂ Si
Fluorine	7782-41-4	Highly Toxic Gas	F ₂
Formaldehyde (anhydrous)	50-00-0	Highly Toxic Gas	CH ₂ O
Germane	7782-65-2	Highly Toxic Gas	GeH ₄
Hexaethyl tetraphosphate	757-58-4	Highly Toxic Gas	(C ₂ H ₅ O) ₆ P ₄
Hydrogen azide	7782-79-8	Highly Toxic Gas	HN ₃
Hydrogen cyanide	74-90-8	Highly Toxic Gas	HCN
Hydrogen selenide	71517783	Highly Toxic Gas	H ₂ Se
Hydrogen sulfide	61417783	Highly Toxic Gas	H ₂ S
Hydrogen telluride	91717783	Highly Toxic Gas	H ₂ Te
Nickel tetracarbonyl	13463-39-3	Highly Toxic Gas	Ni(CO) ₄
Nitrogen dioxide	10102-44-0	Highly Toxic Gas	NO ₂
Osmium tetroxide	20816-12-0	Highly Toxic Gas	OsO ₄
Oxygen difluoride	7783-41-7	Highly Toxic Gas	OF ₂
Perchloryl fluoride	7616-94-6	Highly Toxic Gas	ClFO ₅
Perfluoroisobutylene	382-21-8	Highly Toxic Gas	C ₄ F ₈
Phosgene	75-44-5	Highly Toxic Gas	COCl ₂
Phosphine	7803-51-2	Highly Toxic Gas	PH ₃
Phosphorous pentafluoride	7647-19-0	Highly Toxic Gas	PF ₅
Selenium hexafluoride	7783-79-1	Highly Toxic Gas	SeF ₆
Silicon tetrachloride	10026-04-7	Highly Toxic Gas	SiCl ₄
Silicon tetrafluoride	7783-61-1	Highly Toxic Gas	SiF ₄
Stibine	7803-52-3	Highly Toxic Gas	H ₃ Sb
Disulfur decafluoride	5714-22-7	Highly Toxic Gas	S ₂ F ₁₀
Sulfur tetrafluoride	7783-60-0	Highly Toxic Gas	SF ₄
Tellurium hexafluoride	7783-80-4	Highly Toxic Gas	TeF ₆
Tetraethyl pyrophosphate	107-49-3	Highly Toxic Gas	C ₈ H ₂₀ O ₇ P ₂
Tetraethyl dithiopyrophosphate	3689-24-5	Highly Toxic Gas	C ₈ H ₂₀ O ₅ P ₂ S ₂
Trifluoroacetyl chloride	354-32-5	Highly Toxic Gas	C ₂ ClF ₃ O
Tungsten hexafluoride	7783-82-6	Highly Toxic Gas	WF ₆

List Of Equipment Requiring EHS Approval Prior to Purchase

EQUIPMENT TYPE

REASON FOR LISTING

AEDs

Periodic Inspection required. Locations must be mapped in F.I.S.

Air Pollution Abatement Equipment

BAAQMD requires a Permit to Construct and a Permit to Operate. Annual Fees are also required.

Biosafety Cabinets

CalOSHA requires annual monitoring and certification to ensure effectiveness.

Chemical Fume Hoods

CalOSHA requires annual monitoring and certification to ensure effectiveness.

Class 3 or 4 Lasers

Laser Safety Training, PPE, and Controls are required.

Deluge Showers and
Emergency Eye Wash Stations

CalOSHA requires monthly monitoring to ensure effectiveness.

Emergency Generators *(50 HP or greater)*

BAAQMD requires an Authority to Construct and a Permit to Operate. Annual Fees are also required.

Fire Extinguishers

CalOSHA requires monthly, annual, 6 year and 12 year inspections. Locations must be mapped in F.I.S.

Fire Suppression Systems

CalOSHA requires inspections. Locations must be mapped in F.I.S.

Ionizing Radiation-Producing Equipment

Radiological Health Branch requires machine registration and annual fees. Radiation monitoring may be required.