

Physical Hazards

Substance Name	CAS #	Pyrophoric	Water Reactive	Explosive
Acetyl bromide	110-22-5		X	
Acetyl chloride	75-36-5		X	
Acetyl peroxide	110-22-5			X
Aluminum alkyl halides	--	X	X	
Aluminum alkyl hydrides	--	X	X	
Aluminum alkyls	--		X	
Aluminum aminoborohydride	--	X		
Aluminum borohydride	16962-07-5	X	X	
Aluminum carbide	1299-86-1		X	
Aluminum ferrosilcon powder	12003-41-7		X	
Aluminum hydride	7784-21-6	X	X	
Aluminum phosphide	20859-73-8	X		
Aluminum powder	7429-90-5	X	X	
Aluminum silicon powder	--	X	X	
Ammonium perchlorate	7790-98-9			X
Ammonium picrate	131-74-8			X
Amyl trichlorosilane	107-72-2		X	
Antimony pentachloride	7647-18-9		X	
Antimony, triethyl	617-85-6		X	
Antimony, trimethyl	594-10-5		X	
Arsenic trichloride	7784-34-1		X	
Arsenic, triethyl	617-75-4		X	
Arsenic, trimethyl	593-88-4		X	

Barium azide	18810-58-7			X
Barium carbide	12070-27-8		X	
Barium hydride	13477-09-3		X	
Barium sulfide	21109-95-5		X	
Benzene, 1,2-epoxyethyl	96-09-3	X		
Benzoyl chloride	98-88-4		X	
Benzoyl peroxide	94-36-0			X
Benzyl sodium	1121-53-5	X		
Beryllium	7440-41-7	X		
Beryllium borohydride	30374-53-9	X		
Beryllium hydride	7787-52-2	X		
Bis(ethylamino) siloxenebis-cyclopentadienyl manganese	--	X		
Bis-dimethylstibine oxide	--	X		
Bismuth	7440-69-9	X		
Boron	7440-42-8	X		
Boron arsenotribromideboron chloride tetramer	--	X		
Boron triazide	--	X		
Boron tribromide	10294-33-4	X		
Boron trifluoride dimethyl etherate	353-42-4		X	
Boron, triethyl	97-94-9	X		
Boron, trimethyl	593-90-8	X		
Bromine pentafluoride	7789-30-2	X		
Bromoacetylene	593-61-3	X		
Bromoethyne	593-61-3	X		
Bromopropyne	106-96-7			X
Bromosilane	13465-73-1	X		
Butadiene	106-99-0	X		

Butanone peroxide	1338-23-4			X
Butyl lithium	109-72-8	X		
Cacodyl	471-35-2	X		
Cacodyl arsine	--	X		
Cacodyl chloride	557-89-1	X		
Cacodyl sulfide	591-10-6	X		
Cadmium	7440-43-9	X		
Cadmium amide	22750-53-4	X		
Cadmium nitride	12380-95-9	X		
Calcium	7440-70-2	X	X	
Calcium carbide	75-20-7	X	X	
Calcium cyanamide	156-62-7		X	
Calcium hydride	7789-78-8	X	X	
Calcium hypochlorite	7778-54-3	X		
Calcium magnesium silicon	--		X	
Calcium nitride	12013-82-0	X		
Calcium phosphide	1305-99-3	X		
Calcium silicide	12737-18-7		X	
Calcium sulfide	20548-54-3	X		
Carbon disulfide	75-15-0	X		
Carbon hexachloride	98299-61-7	X		
Carbon trichloride	--	X		
Cerium (powder or turnings)	7440-45-1	X	X	
Cerium hydride	13864-02-3	X		
Cerium nitride	25764-08-3	X		
Cesium	7440-46-2	X	X	
Cesium amide	22205-57-8	X		
Cesium hydride	13772-47-9	X		
Cesium oxide	20281-00-9	X		
Cesium phosphide	113737-02-3	X		
Cesium silicide	39293-43-1	X		
Charcoal	16291-96-6	X		

Chlorine trifluoride	7790-91-2	X		
Chloroacetylene	593-63-5	X		
Chlorodimethyl arsine	557-89-1	X		
Chloroethyne	593-63-5	X		
Chlorosulfonic acid	7790-94-5	X		
Chromium	7440-47-3	X		
Chromium oxide	12018-00-7	X		
Chromium-cobalt alloy	11114-92-4	X		
Chromyl chloride	14977-61-8	X		
Cobalt (powder)	7440-48-4	X		
Cobalt abietate	26998-20-9	X		
Cobalt nitride	10141-05-6	X		
Cobaltous resinate	68956-82-1	X		
Copper (dust)	7440-50-8	X		
Copper hydride	13517-00-5	X		
Cumene peroxide	80-15-9			X
Cupric phosphide	12019-57-7	X		
Decaborane	17702-41-9	X		
Diacetylene	460-12-8	X		
Diamidophosphorous acid	10043-91-1	X		
Diazirine	157-22-2	X		
Diazodinitrophenol	4682-03-5			X
Diborane	19287-45-7	X		
Dibutyl boron chloride	1730-69-4	X		
Dibutyl chloroborane	--	X		
Dibutyl magnesium	1191-47-5	X		
Di-chloroacetylene	7572-29-4	X		
Diethyl arsine	692-42-2	X		
Diethyl beryllium	542-63-2	X		
Diethyl cadmium	592-02-9	X		
Diethyl dichlorosilane	--	X		

Diethyl phosphine	627-49-6	X		
Diethyl zinc	557-20-0	X	X	
Diethylaluminum bromide	760-19-0	X		
Diethylaluminum chloride	96-10-6	X		
Diethylaluminum hydride	871-27-2	X		
Difluorourea	1510-31-2	X		
Digermane	13818-89-8	X		
Diisobutyl aluminum chloride	1779-25-5	X		
Diisobutyl aluminum hydride	1191-15-7	X		
Diisopropylberyllium	15721-33-2	X		
Dimethyl allyl arsine	--	X		
Dimethyl arsine	593-57-7	X		
Dimethyl beryllium	506-63-8	X		
Dimethyl cadmium	506-82-1	X		
Dimethyl dichlorosilane	1066-35-9	X		
Dimethyl magnesium	2999-74-8	X		
Dimethyl manganese	33212-68-9	X		
Dimethyl phosphine	676-59-5	X		
Dimethyl phosphoramidate	597-07-9	X		
Dimethylchloroarsine	557-89-1	X		
Dimethylzinc	544-97-8		X	
Dinitrophenol	51-28-5			X
Dinitrophenylhydrazine	119-26-6			X
Dinitroresorcinol	616-74-0			X
Diphosphine	13445-50-6	X		
Dipicryl amine	131-73-7			X
Dipicryl sulfide	28930-30-5			X
Dipropyl aluminum hydride	--	X		

Dipropyl chloroborane	22086-53-9	X		
Dipropyl zinc	628-91-1	X		
Disilane	1590-87-0	X		
Disilylamino diborane	--	X		
Disilylamino dichloroborane	--	X		
Disulfur dinitride	25474-92-4	X		
Divanadium dodecacarbonyl	--	X		
Divinyl zinc	1119-22-8	X		
Dodecanoyl peroxide	105-74-8			X
Ethanoyl bromide	506-96-7	X		
Ethanoyl chloride	75-36-5	X		
Ethyl aluminum sesquichloride	12075-68-2	X		
Ethyl lithium	811-49-4	X		
Ethyl nitrite	109-95-5	X		
Ethyl pentaborane	28853-06-7	X		
Ethyl trichlorosilane	115-21-9	X		
Ethylaluminum dichloride	563-43-9	X		
Ethyldichlorosilane	1789-58-8		X	
Ethylene oxide	75-21-8			X
Europium (powder)	7440-53-1	X		
Ferrosilicon	8049-17-0		X	
Gallium hydride	13572-93-5	X		
Germanium hydride	7782-65-2	X		
Germanium tetrahydride	7782-65-2	X		
Hafnium (powder)	7440-58-6	X		
Hafnium borohydride	--	X		
Hexaborane	2377-80-2	X		
Hexachlorodisilane	13465-77-5		X	
Hydrogen phosphide	10028-24-7	X		

Iron pentacarbonyl	13463-40-6	X		
Iron powder	7439-89-6	X		
Lauric peroxide	105-74-8			X
Lead azide	13424-46-9			X
Lead imide	--	X		
Lithium	7439-93-2	X	X	
Lithium alkyls	--		X	
Lithium aluminum hydride	16853-85-3	X	X	
Lithium aluminum tri-tert -butoxyhydride	17476-04-9	X		
Lithium amide	7782-89-0	X		
Lithium azide	19597-69-4			X
Lithium borohydride	16949-15-8	X	X	
Lithium dimethylamide	3585-33-9	X		
Lithium ferrosilicon	70399-13-2		X	
Lithium hydride	7580-67-8	X	X	
Lithium nitride	26134-62-3		X	
Lithium phosphide	12057-29-3	X		
Lithium silicide	68848-64-6	X	X	
Lithium tetramethyl borate	2169-38-2	X		
Magnesium (powder, beads or turnings)	7439-95-4	X	X	
Magnesium alkyls	--		X	
Magnesium aluminum phosphide	--		X	
Magnesium diamide	7803-54-5	X		
Magnesium hydride	7693-27-8	X	X	
Magnesium phosphide	12057-74-8	X	X	
Magnesium silicide	22831-39-6		X	
Magnesium, diethyl	557-18-6	X		
Magnesium, diphenyl	555-54-4	X		
Maneb	12427-38-2		X	

Manganese	7439-96-5	X	X	
Manganese heptoxide	12057-92-0	X		
Mercury azide	38232-63-2			X
Mercury fulminate	628-86-4			X
Methyl aluminum sesquibromide	12263-85-3	X		
Methyl aluminum sesquichloride	12542-85-7	X		
Methyl copper	--	X		
Methyl ethyl ketone peroxide	1338-23-4			X
Methyl lithium	917-54-4	X		
Methyl magnesium bromide	--		X	
Methyl phosphine	593-54-4	X		
Methyl trichlorosilane	75-79-6	X		
Methyldichlorosilane	75-54-7		X	
Methylene dilithium	--	X		
Methylethylidoarsine	65313-31-7	X		
Methylhydrazine	60-34-4	X		
Monochlorodiborane	--	X		
n -propyl lithium	2417-93-8	X		
Nickel carbonyl	13463-39-3	X		
Nickel lanthanum alloy	--	X		
Nitrocellulose	9004-70-0			X
Nitrogen trifluoride	7783-54-2			X
Nitrogen triiodide	13444-85-4			X
Nitroglycerine	55-63-0			X
Nitroguanidine	556-88-7			X
Nitromethane	75-52-5			X
Nitrosilane	--	X		
Nitrourea	556-89-8			X
Oxodisilane	22755-00-6	X		

Pentaborane	19624-22-7	X		
Pentamethyl aluminum hydride	--	X		
Phenyl cyclotetramethylene borine	--	X		
Phenyl lithium	591-51-5	X		
Phenylsilver	5274-48-6	X		
Phosphine	7803-51-2	X		
Phosphorus	7723-14-0	X		
Phosphorus oxychloride	10025-87-3	X		
Phosphorus pentachloride	10026-13-8	X	X	
Phosphorus pentasulfide	7723-14-0	X	X	
Phosphorus sesquisulfide	1314-85-8	X	X	
Phosphorus trichloride	7719-12-2	X		
Phosphorus trioxide	1314-24-5	X		
Picramide	489-98-5			X
Picric acid	88-89-1			X
Picryl chloride	88-88-0			X
Picryl sulfonic acid	2508-19-2			X
Potassium	7440-09-7	X	X	
Potassium arsenic alloy	--	X		
Potassium borohydride	13762-51-1		X	
Potassium carbide	22754-96-7	X		
Potassium carbonyl	12397-35-2	X		
Potassium graphite	12081-88-8	X		
Potassium hydride	7693-26-7	X		
Potassium nitride	29285-24-3	X		
Potassium nitromethane	--			
Potassium peroxide	17014-71-0		X	

Potassium phosphide	20770-41-6	X	X	
Potassium sodium alloys	11135-81-2		X	
Potassium-antimony alloy	--	X		
Propargyl bromide	106-96-7			X
Prosiloxane	--	X		
Pyridinium perchlorate	15598-34-2	X		
Rubidium	7440-17-7	X	X	
Rubidium hydride	13446-75-8	X		
Silane	7803-62-5	X		
Silyl phosphine		X		
Sodium	7440-23-5	X	X	
Sodium aluminum hydride	13770-96-2	X	X	
Sodium amalgam	--	X		
Sodium amide	7782-92-5	X		
Sodium borohydride	16940-66-2		X	
Sodium carbide	2881-62-1	X		
Sodium hydrazide	13598-47-5	X		
Sodium hydride	7646-69-7	X	X	
Sodium hydrosulfite	7775-14-6	X		
Sodium lead alloy	12740-44-2	X		
Sodium methylate	124-41-4	X		
Sodium nitromethane	--	X		
Sodium phosphamide	--	X		
Sodium phosphide	24167-76-8	X	X	
Sodium silicide	152379-81-2	X		
Sodium sulfide	1313-82-2	X		
Sodium-potassium alloy	11135-81-2	X		
Stannic phosphide	25324-56-5	X	X	
Strontium	7440-24-6	X	X	
Strontium azide	19465-89-5	X		

Strontium hydride	13598-33-9	X		
Strontium phosphide	12504-13-1		X	
Succinic peroxide	12-23-9			X
Sulfur (powder)	7704-34-9	X		
Sulfur trioxide	7446-11-9		X	
Sulfuryl chloride	7791-25-5		X	
Tetraborane	18283-93-7	X		
Tetrachlorodiborane	13701-67-2	X		
Tetramethyl diborane	21482-59-7	X		
Tetramethyl digalline	--	X		
Tetramethyl silane	75-76-3	X		
Tetranitroaniline	3698-54-2			X
Tetraphenyl diarsine	--	X		
Thiophosphoryl fluoride	2404-52-4	X		
Thorium	7440-29-1	X		
Thorium hydride	140004-84-0	X		
Thorium oxysulfide	--	X		
Titanium dibromide	13783-04-5	X		
Titanium dichloride	10049-06-6	X		
Titanium diiodide	13783-07-8	X		
Titanium monoxide	12137-20-1	X		
Titanium trichloride	7705-07-9	X		
Tri- n -butylaluminum	1116-70-7	X		
Triazido borine	--	X		
Tribromoborane	1024-33-4		X	
Tribromosilane	7789-57-3	X		
Tributyl phosphine	213-651-2	X		
Tributylborane	122-56-5	X		
Trichlorosilane	10025-78-2	X	X	
Triethyl aluminum	97-93-8	X		
Triethyl aluminum etherate	--	X		
Triethyl bismuth	617-77-6	X		

Triethyl diborane	62133-36-2	X		
Triethyl indium	923-34-2	X		
Triethyl tellurium	--	X		
Triethylantimony	617-85-6	X		
Triethylborane	97-94-9	X		
Triethylstibine	617-85-6	X		
Trigermane	14691-44-2	X		
Triisobutylaluminum	100-99-2	X		
Trimethyl antimony	594-10-5	X	X	
Trimethyl arsine	593-88-4	X	X	
Trimethyl bismuth	593-91-9	X		
Trimethyl gallium	1445-79-0	X	X	
Trimethyl indium	3385-78-2	X		
Trimethyl phosphine	594-09-2	X		
Trimethyl thallium	3003-15-4	X		
Trimethylaluminum	75-24-1	X		
Trimethylaluminum etherate	--			
Trimethylchlorosilane	75-77-4	X		
Trinitroaniline	489-98-5			X
Trinitroanisole	606-35-9			X
Trinitrobenzene	99-35-4			X
Trinitrobenzenesulfonic acid	2508-19-2			X
Trinitrobenzoic acid	129-66-8			X
Trinitrocresol	602-99-3			X
Trinitronaphthalene	55810-17-8			X
Trinitrophenol	88-89-1			X
Trinitroresorcinol	82-71-3			X
Trinitrotoluene	118-96-7			X
Triphenyl aluminum	841-76-9	X		
Triphenyl tungsten	--			
Tripropyl antimony	5613-69-4	X		
Tripropyl boron	1116-61-6	X		

Tripropyl indium	3015-98-3	X		
Tripropylaluminum	--	X		
Tris(trifluoromethyl) phosphine	432-04-2	X		
Tris(trimethyl silyl) phosphine	15573-38-3	X		
Trisilane	7783-26-8	X		
Trisilyl arsine	15100-34-6	X		
Trisilyl phosphine	15110-33-5	X		
Trisilylamine	13862-16-3	X	X	
Trisilylamine	13862-16-3	X		
Trisulfur dinitrogen dioxide	--	X		
Trivinyl bismuth	--	X		
Trivinyl stibine	--	X		
Urea nitrate	124-47-0			X
Zinc (powder or dust)	7440-66-6	X	X	
Zinc dimethyl	544-97-8	X		
Zinc isoamyl	21261-07-4	X		
Zinc isobutyl	126409-67-6	X		
Zinc phosphide	1314-84-7		X	
Zirconium	7440-67-7	X		
Zirconium borohydride	12370-59-1	X		
Zirconium carbonitride	--	X		
Zirconium dibromide	--	X		

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