

List of Toxic and Pyrophoric Gases that require preapproval from MSU EHS BEFORE purchase

Chemical	MSDS	CAS #	Health	Fire	Reactive
1,1,3,3,3-PENTAFLUORO-2-(TRIFLUOROMETHYL)PROP-1-ENE	<a href="#">PERFLUOROISOBUTYLENE</a>	382-21-8	b	b	b
1,1'-THIOBIS[2-CHLOROETHANE]	<a href="#">SULFUR MUSTARD</a>	505-60-2	4	1	1
1,2-EPOXYPROPANE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
1,2-PROPYLENE OXIDE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
1,3-BUTADIENE	<a href="#">1,3-BUTADIENE</a>	106-99-0	2 <sup>d</sup>	4	0
1-CHLORO-1,2,2-TRIFLUOROETHENE	<a href="#">CHLOROTRIFLUOROETHYLENE</a>	79-38-9	3	4	4
1-CHLORO-2-(BETA-CHLOROETHYLTHIO)ETHANE	<a href="#">SULFUR MUSTARD</a>	505-60-2	4	1	1
1-NITROSOOXYETHANE	<a href="#">ETHYL NITRITE</a>	109-95-5	4	4	4
2-METHYL-1,3-BUTADIENE	<a href="#">2-METHYL-1,3-BUTADIENE</a>	78-79-5	1 <sup>i</sup>	4	0
ACETONE HEXAFLUORIDE	<a href="#">HEXAFLUOROACETONE</a>	684-16-2	3	0	2
ACETYL FLUORIDE	<a href="#">ACETYL FLUORIDE</a>	557-99-3	3	0	0
AMIDOGEN	<a href="#">NITRIC OXIDE</a>	10102-43-9	3	0	0
AMINOETHANE	<a href="#">ETHYLAMINE</a>	75-0-7	3	4	0
AMINOMETHANE	<a href="#">METHYLAMINE</a>	74-89-5	3	4	0
AMMONIA	<a href="#">AMMONIA</a>	7664-41-7	3	1	0
ANTIMONY (V) FLUORIDE	<a href="#">ANTIMONY PENTAFLUORIDE</a>	7783-70-2	4	0	1
ANTIMONY HYDRIDE	<a href="#">STIBINE</a>	7803-52-3	4	4	2
ANTIMONY PENTAFLUORIDE	<a href="#">ANTIMONY PENTAFLUORIDE</a>	7783-70-2	4	0	1
ANTIMONY TRIHYDRIDE	<a href="#">STIBINE</a>	7803-52-3	4	4	2
ARSANE	<a href="#">ARSINE</a>	7784-42-1	4	4	2
ARSENIC (III) FLUORIDE	<a href="#">ARSENIC TRIFLUORIDE</a>	7784-35-2	3	0	1
ARSENIC (V) FLUORIDE	<a href="#">ARSENIC PENTAFLUORIDE</a>	7784-36-3	3	1	0
ARSENIC PENTAFLUORIDE	<a href="#">ARSENIC PENTAFLUORIDE</a>	7784-36-3	3	1	0
ARSENIC TRIFLUORIDE	<a href="#">ARSENIC TRIFLUORIDE</a>	7784-35-2	3	0	1
ARSENIC TRIHYDRIDE	<a href="#">ARSINE</a>	7784-42-1	4	4	2
ARSENIURETTED HYDROGEN	<a href="#">ARSINE</a>	7784-42-1	4	4	2
ARSENOUS HYDRIDE	<a href="#">ARSINE</a>	7784-42-1	4	4	2
ARSINE	<a href="#">ARSINE</a>	7784-42-1	4	4	2
ARSORANE	<a href="#">ARSENIC PENTAFLUORIDE</a>	7784-36-3	3	1	0
AZANE	<a href="#">AMMONIA</a>	7664-41-7	3	1	0
AZIMETHYLENE	<a href="#">DIAZOMETHANE</a>	334-88-3	4	4	4
AZOMETHYLENE	<a href="#">DIAZOMETHANE</a>	334-88-3	4	4	4
BIETHYLENE	<a href="#">1,3-BUTADIENE</a>	106-99-0	2 <sup>d</sup>	4	0
BIS(2-CHLOROETHYL) SULFIDE	<a href="#">SULFUR MUSTARD</a>	505-60-2	4	1	1
BIS(TRIFLUOROMETHYL)PEROXIDE	<a href="#">BIS(TRIFLUOROMETHYL)PEROXIDE</a>	927-84-4	a, j	a, j	a, j
BOROETHANE	<a href="#">DIBORANE</a>	19287-45-7	4	4	3
BORON BROMIDE	<a href="#">BORON TRIBROMIDE</a>	10294-33-4	4	2	0
BORON FLUORIDE	<a href="#">BORON TRIFLUORIDE</a>	7637-07-2	4	0	1
BORON HYDRIDE	<a href="#">DIBORANE</a>	19287-45-7	4	4	3
BORON TRIBROMIDE	<a href="#">BORON TRIBROMIDE</a>	10294-33-4	4	2	0
BORON TRICHLORIDE	<a href="#">BORON TRICHLORIDE</a>	10294-34-5	3	0	1
BORON TRIFLUORIDE	<a href="#">BORON TRIFLUORIDE</a>	7637-07-2	4	0	1
BORON(III) CHLORIDE	<a href="#">BORON TRICHLORIDE</a>	10294-34-5	3	0	1
BROMANE	<a href="#">HYDROGEN BROMIDE</a>	10035-10-6	3	0	0
BROMINE	<a href="#">BROMINE</a>	7726-95-6	3	0	0
BROMINE CHLORIDE	<a href="#">BROMINE CHLORIDE</a>	13863-41-7	3	0	1
BROMINE MONOCHLORIDE	<a href="#">BROMINE CHLORIDE</a>	13863-41-7	3	0	1
BROMINE PENTAFLUORIDE	<a href="#">BROMINE PENTAFLUORIDE</a>	7789-30-2	3	0	3
BROMINE TRIFLUORIDE	<a href="#">BROMINE TRIFLUORIDE</a>	7787-71-5	3	0	3
BROMINE TRIFLUORIDE	<a href="#">BROMINE TRIFLUORIDE</a>	7787-71-5	3	0	3
BROMINE(I) CHLORIDE	<a href="#">BROMINE CHLORIDE</a>	13863-41-7	3	0	1
BROMOCHLORIDE	<a href="#">BROMINE CHLORIDE</a>	13863-41-7	3	0	1
BROMOETHENE	<a href="#">BROMOETHENE</a>	593-60-2	2 <sup>d</sup>	4	1
BROMOETHYLENE	<a href="#">BROMOETHENE</a>	593-60-2	2 <sup>d</sup>	4	1
BROMOMETHANE	<a href="#">BROMOMETHANE</a>	74-83-9	3	1	0
CARBINAMINE	<a href="#">METHYLAMINE</a>	74-89-5	3	4	0
CARBOMETHANE	<a href="#">KETENE</a>	463-51-4	3	0	0
CARBON DICHLORIDE OXIDE	<a href="#">PHOSGENE</a>	75-44-5	4	1	0
CARBON DIFLUORIDE OXIDE	<a href="#">CARBONYL FLUORIDE</a>	353-50-4	4	0	1
CARBON DISULFIDE	<a href="#">CARBON DISULFIDE</a>	75-15-0	3	4	0
CARBON MONOXIDE	<a href="#">CARBON MONOXIDE</a>	630-08-0	2 <sup>e</sup>	4	0
CARBON NITRIDE	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
CARBON OXIDE SULFIDE	<a href="#">CARBONYL SULFIDE</a>	463-58-1	3	4	1
CARBON OXYCHLORIDE	<a href="#">PHOSGENE</a>	75-44-5	4	1	0
CARBON OXYFLUORIDE	<a href="#">CARBONYL FLUORIDE</a>	353-50-4	4	0	1
CARBONONITRIDIC CHLORIDE	<a href="#">CYANOGEN CHLORIDE</a>	506-77-4	4	0	2
CARBONOUS OXIDE	<a href="#">CARBON MONOXIDE</a>	630-08-0	2 <sup>e</sup>	4	0
CARBONYL DICHLORIDE	<a href="#">PHOSGENE</a>	75-44-5	4	1	0
CARBONYL DIFLUORIDE	<a href="#">CARBONYL FLUORIDE</a>	353-50-4	4	0	1
CARBONYL FLUORIDE	<a href="#">CARBONYL FLUORIDE</a>	353-50-4	4	0	1
CARBONYL SULFIDE	<a href="#">CARBONYL SULFIDE</a>	463-58-1	3	4	1
CHLORCYAN	<a href="#">CYANOGEN CHLORIDE</a>	506-77-4	4	0	2

CHLORENE	<a href="#">ETHYL CHLORIDE</a>	75-00-3	2 <sup>i</sup>	4	2
CHLORINE	<a href="#">CHLORINE</a>	7782-50-5	4	0	0
CHLORINE CYANIDE	<a href="#">CYANOGEN CHLORIDE</a>	506-77-4	4	0	2
CHLORINE DIOXIDE	<a href="#">CHLORINE DIOXIDE</a>	10049-04-4	3	0	4
CHLORINE FLUORIDE	<a href="#">CHLORINE TRIFLUORIDE</a>	7790-91-2	4	0	3
CHLORINE FLUORINE OXIDE	<a href="#">PERCHLORYL FLUORIDE</a>	7616-94-6	3	2	3
CHLORINE MONOXIDE	<a href="#">CHLORINE MONOXIDE</a>	12301-79-0	a	a	a
CHLORINE OXIDE	<a href="#">CHLORINE DIOXIDE</a>	10049-04-4	3	0	4
CHLORINE OXYFLUORIDE	<a href="#">PERCHLORYL FLUORIDE</a>	7616-94-6	3	2	3
CHLORINE PENTAFLUORIDE	<a href="#">CHLORINE PENTAFLUORIDE</a>	13637-63-3	3	0	3
CHLORINE PEROXIDE	<a href="#">CHLORINE DIOXIDE</a>	10049-04-4	3	0	4
CHLORINE TRIFLUORIDE	<a href="#">CHLORINE TRIFLUORIDE</a>	7790-91-2	4	0	3
CHLORINE(II) OXIDE	<a href="#">CHLORINE MONOXIDE</a>	12301-79-0	a	a	a
CHLOROCYANIDE	<a href="#">CYANOGEN CHLORIDE</a>	506-77-4	4	0	2
CHLOROCYANOGEN	<a href="#">CYANOGEN CHLORIDE</a>	506-77-4	4	0	2
CHLOROETHANE	<a href="#">ETHYL CHLORIDE</a>	75-00-3	2 <sup>i</sup>	4	2
CHLOROETHENE	<a href="#">VINYL CHLORIDE</a>	75-01-4	2 <sup>d</sup>	4	2
CHLOROFORMONITRILE	<a href="#">CYANOGEN CHLORIDE</a>	506-77-4	4	0	2
CHLOROFORMYL CHLORIDE	<a href="#">PHOSGENE</a>	75-44-5	4	1	0
CHLOROMETHANE	<a href="#">METHYL CHLORIDE</a>	74-87-3	2 <sup>d</sup>	4	0
CHLOROOXIDANYL	<a href="#">CHLORINE MONOXIDE</a>	12301-79-0	a	a	a
CHLOROTRIFLUORIDE	<a href="#">CHLORINE TRIFLUORIDE</a>	7790-91-2	4	0	3
CHLOROTRIFLUOROETHENE	<a href="#">CHLOROTRIFLUOROETHYLENE</a>	79-38-9	3	4	3
CHLOROTRIFLUOROETHYLENE	<a href="#">CHLOROTRIFLUOROETHYLENE</a>	79-38-9	3	4	3
CHLORYL	<a href="#">CHLORINE DIOXIDE</a>	10049-04-4	3	0	4
CYANIC CHLORIDE	<a href="#">CYANOGEN CHLORIDE</a>	506-77-4	4	0	2
CYANOGEN	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
CYANOGEN CHLORIDE	<a href="#">CYANOGEN CHLORIDE</a>	506-77-4	4	0	2
CYANOTRIFLUOROMETHANE	<a href="#">TRIFLUOROACETONITRILE</a>	353-85-5	4	0	0
DEUTERIUM BROMIDE	<a href="#">DEUTERIUM BROMIDE</a>	13536-59-5	3	0	0
DEUTERIUM CHLORIDE	<a href="#">DEUTERIUM CHLORIDE</a>	7698-05-7	3	0	1
DEUTERIUM SULFIDE	<a href="#">DEUTERIUM SULFIDE</a>	13536-94-2	4	0	0
DEUTOXIDE OF NITROGEN	<a href="#">NITROGEN DIOXIDE</a>	10102-44-0	3	0	0
DIAZIRINE	<a href="#">DIAZOMETHANE</a>	334-88-3	4	4	4
DIAZOMETHANE	<a href="#">DIAZOMETHANE</a>	334-88-3	4	4	4
DIBORANE	<a href="#">DIBORANE</a>	19287-45-7	4	4	3
DIBORON HEXAHYDRIDE	<a href="#">DIBORANE</a>	19287-45-7	4	4	3
DIBROMOMETHANE	<a href="#">DIBROMOMETHANE</a>	74-95-3	2 <sup>i</sup>	0	0
DICHLORODIETHYL SULFIDE	<a href="#">SULFUR MUSTARD</a>	505-60-2	4	1	1
DICHLOROETHYNE	<a href="#">DIPHOSGENE</a>	503-38-8	4	0	0
DICHLOROFORMALDEHYDE	<a href="#">PHOSGENE</a>	75-44-5	4	1	0
DICHLOROMETHANE	<a href="#">DICHOLORMETHANE</a>	75-09-2	2 <sup>d</sup>	1	0
DICHLOROMETHANONE	<a href="#">PHOSGENE</a>	75-44-5	4	1	0
DICHLOROSILANE	<a href="#">DICHLOROSILANE</a>	4109-96-0	4	4	2
DICYAN	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
DICYANOGEN	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
DIFLUORINE MONOXIDE	<a href="#">OXYGEN DIFLUORIDE</a>	7783-41-7	4	0	2
DIHYDROGEN MONOSULFIDE	<a href="#">HYDROGEN SULFIDE</a>	7783-06-4	4	4	0
DIHYDROGEN SULFIDE	<a href="#">HYDROGEN SULFIDE</a>	7783-06-4	4	4	0
DIMETHYLAMINE	<a href="#">DIMETHYLAMINE</a>	124-40-3	3	4	0
DIMETHYLENE OXIDE	<a href="#">ETHYLENE OXIDE</a>	75-21-8	3	4	4
DIMETHYLSILANE	<a href="#">DIMETHYLSILANE</a>	1111-74-6	1 <sup>h</sup>	4	1
DINITROGEN TETROXIDE	<a href="#">NITROGEN TETROXIDE</a>	10544-72-6	3	0	0
DIPHOSGENE	<a href="#">DIPHOSGENE</a>	503-38-8	4	0	0
DISILANE	<a href="#">DISILANE</a>	1590-87-0	0	4 <sup>h</sup>	0
DISILICANE	<a href="#">DISILANE</a>	1590-87-0	0	4 <sup>h</sup>	0
DISILICON HEXAHYDRIDE	<a href="#">DISILANE</a>	1590-87-0	0	4 <sup>h</sup>	0
DISULFUR DECAFLUORIDE	<a href="#">SULFUR PENTAFLUORIDE</a>	5714-22-7	4	3	2
DITHIOCARBONIC ANHYDRIDE	<a href="#">CARBON DISULFIDE</a>	75-15-0	3	4	0
DIVINYL	<a href="#">1,3-BUTADIENE</a>	106-99-0	2 <sup>d</sup>	4	0
EPOXYETHANE	<a href="#">ETHYLENE OXIDE</a>	75-21-8	3	4	3
EPXOYPROPANE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
ERYTHRENE	<a href="#">1,3-BUTADIENE</a>	106-99-0	2 <sup>d</sup>	4	0
ETHANAMINE	<a href="#">ETHYLAMINE</a>	75-0-7	3	4	0
ETHANE DINITRILE	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
ETHANETHIOL	<a href="#">ETHYL MERCAPTAN</a>	75-01-1	2 <sup>i</sup>	4	0
ETHENONE	<a href="#">KETENE</a>	463-51-4	3	0	0
ETHYL ALCOHOL NITRITE	<a href="#">ETHYL NITRITE</a>	109-95-5	4	4	4
ETHYL BENZENE	<a href="#">ETHYLBENZENE</a>	100-41-4	2 <sup>i</sup>	3	0
ETHYL CHLORIDE	<a href="#">ETHYL CHLORIDE</a>	75-00-3	2 <sup>i</sup>	4	2
ETHYL MERCAPTAN	<a href="#">ETHYL MERCAPTAN</a>	75-01-1	2 <sup>i</sup>	4	0
ETHYL NITRITE	<a href="#">ETHYL NITRITE</a>	109-95-5	4	4	4
ETHYLBENZOL	<a href="#">ETHYLBENZENE</a>	100-41-4	2 <sup>i</sup>	3	0
ETHYLENE OXIDE	<a href="#">ETHYLENE OXIDE</a>	75-21-8	3	4	3

ETHYLSILANE	<a href="#">ETHYLSILANE</a>	2814-79-1	2 <sup>h</sup>	4	0
FLUORINE	<a href="#">FLUORINE</a>	7784-41-4	4	0	4
FLUORINE MONOXIDE	<a href="#">OXYGEN DIFLUORIDE</a>	7783-41-7	4	0	2
FLUORO ACID AIR	<a href="#">SILICON TETRAFLUORIDE</a>	7783-61-1	3	0	2
FLUROETHENE	<a href="#">FLUROETHENE</a>	75-02-5	2 <sup>d</sup>	4	2
FLUROETHYLENE	<a href="#">FLUROETHENE</a>	75-02-5	2 <sup>d</sup>	4	2
FLUROFORMYL FLUORIDE	<a href="#">CARBONYL FLUORIDE</a>	353-50-4	4	0	1
FLUROPHOSGENE	<a href="#">CARBONYL FLUORIDE</a>	353-50-4	4	0	1
FORMALDEHYDE, GAS	<a href="#">FORMALDEHYDE</a>	50-00-0	4	4	1
FORMIC ANAMMONIDE	<a href="#">FORMALDEHYDE</a>	50-00-0	4	4	1
FORMOL	<a href="#">FORMALDEHYDE</a>	50-00-0	4	4	1
FORMONITRILE	<a href="#">HYDROGEN CYANIDE</a>	74-90-8	4	4	1
GERMANE	<a href="#">GERMANE</a>	7782-65-2	4	4	3
GERMANIUM HYDRIDE	<a href="#">GERMANE</a>	7782-65-2	4	4	3
GERMANIUM TETRAHYDRIDE	<a href="#">GERMANE</a>	7782-65-2	4	4	3
GERMANOMETHANE	<a href="#">GERMANE</a>	7782-65-2	4	4	3
GLYCAMINE	<a href="#">METHYLAMINE</a>	74-89-5	3	4	0
HELIUM-3	<a href="#">HELIUM-3 ISOTOPE</a>	7440-59-7	0 <sup>i</sup>	0	0
HEPTAFLUROBUTYRONITRILE	<a href="#">HEPTAFLUROBUTYRONITRILE</a>	375-00-8	9	9	9
HEXACHLORO-1,3-BUTADIENE	<a href="#">HEXACHLOROBUTADIENE</a>	87-68-3	4	4	1
HEXAFLURO-2-BUTYNE	<a href="#">HEXAFLURO-2-BUTYNE</a>	692-50-2	4	0	0
HEXAFLURO-2-PROPANONE	<a href="#">HEXAFLUROACETONE</a>	684-16-2	3	0	2
HEXAFLUROACETONE	<a href="#">HEXAFLUROACETONE</a>	684-16-2	3	0	2
HEXAFLUROBUTADIENE	<a href="#">HEXAFLUROBUTADIENE</a>	685-63-2	3	4	0
HEXAFLUROTUNGSTEN	<a href="#">TUNGSTEN HEXAFLUROIDE</a>	7783-82-6	4	0	2
HYDROBROMIC ACID	<a href="#">HYDROGEN BROMIDE</a>	10035-10-6	3	0	0
HYDROCHLORIDE	<a href="#">HYDROGEN CHLORIDE</a>	7647-01-0	3	0	1
HYDROCYANIC ACID	<a href="#">HYDROGEN CYANIDE</a>	74-90-8	4	4	1
HYDROFLUROIDE	<a href="#">HYDROGEN FLUROIDE</a>	7664-39-3	4	0	1
HYDROGEN ANTIMONIDE	<a href="#">STIBINE</a>	7803-52-3	4	4	2
HYDROGEN ARSENIDE	<a href="#">ARSINE</a>	7784-42-1	4	4	2
HYDROGEN BROMIDE	<a href="#">HYDROGEN BROMIDE</a>	10035-10-6	3	0	0
HYDROGEN CHLORIDE	<a href="#">HYDROGEN CHLORIDE</a>	7647-01-0	3	0	1
HYDROGEN CYANIDE, GAS	<a href="#">HYDROGEN CYANIDE</a>	74-90-8	4	4	1
HYDROGEN FLUROIDE	<a href="#">HYDROGEN FLUROIDE</a>	7664-39-3	4	0	1
HYDROGEN IODIDE	<a href="#">HYDROGEN IODIDE</a>	10034-85-2	3	0	1
HYDROGEN NITRIDE	<a href="#">AMMONIA</a>	7664-41-7	3	1	0
HYDROGEN PHOSPHIDE	<a href="#">PHOSPHINE</a>	7803-51-2	4	4	2
HYDROGEN SELENIDE	<a href="#">HYDROGEN SELENIDE</a>	7783-07-5	4	4	3
HYDROGEN SULFIDE	<a href="#">HYDROGEN SULFIDE</a>	7783-06-4	4	4	0
HYDROGEN TELLURIDE	<a href="#">HYDROGEN TELLURIDE</a>	7783-09-7	f	f	f
HYDROSELENIC ACID	<a href="#">HYDROGEN SELENIDE</a>	7783-07-5	4	4	3
HYPOFLUROUS ANHYDRIDE	<a href="#">OXYGEN DIFLUORIDE</a>	7783-41-7	4	0	2
IODINE FLUROIDE	<a href="#">IODINE PENTAFLUROIDE</a>	7783-66-6	3	0	2
IODINE PENTAFLUROIDE	<a href="#">IODINE PENTAFLUROIDE</a>	7783-66-6	3	0	2
IODOMETHANE	<a href="#">METHYL IODIDE</a>	74-88-4	3	1	1
ISOCYANATOMETHANE	<a href="#">METHYLISOCYANATE</a>	624-83-9	3	4	2
ISOPRENE	<a href="#">2-METHYL-1,3-BUTADIENE</a>	78-79-5	1 <sup>i</sup>	4	0
ISOTHICYANIC ACID	<a href="#">METHYL ISOTHIOCYANATE</a>	556-61-6	3	1	1
ISOTHIOCYANATOMETHANE	<a href="#">METHYL ISOTHIOCYANATE</a>	556-61-6	3	1	1
KETENE	<a href="#">KETENE</a>	463-51-4	3	0	0
KETOETHYLENE	<a href="#">KETENE</a>	463-51-4	3	0	0
MERCAPTOMETHANE	<a href="#">METHYL MERCAPTAN</a>	74-93-1	4	4	1
METHANAL	<a href="#">FORMALDEHYDE</a>	50-00-0	4	4	1
METHANAMINE	<a href="#">METHYLAMINE</a>	74-89-5	3	4	0
METHANETHIOL	<a href="#">METHYL MERCAPTAN</a>	74-93-1	4	4	1
METHANETHIOL	<a href="#">METHYL MERCAPTAN</a>	74-93-1	4	4	1
METHYL ALDEHYDE	<a href="#">FORMALDEHYDE</a>	50-00-0	4	4	1
METHYL BROMIDE	<a href="#">BROMOMETHANE</a>	74-83-9	3	1	0
METHYL CARBYLAMINE	<a href="#">METHYLISOCYANATE</a>	624-83-9	3	4	2
METHYL CHLORIDE	<a href="#">METHYL CHLORIDE</a>	74-87-3	2 <sup>d</sup>	4	0
METHYL CHLOROSILANE	<a href="#">METHYLCHLOROSILANE</a>	933-00-0	3	3	2
METHYL ETHYLENE OXIDE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
METHYL FORMATE	<a href="#">METHYL METHANOATE</a>	107-31-3	2 <sup>i</sup>	4	0
METHYL IODIDE	<a href="#">METHYL IODIDE</a>	74-88-4	3	1	1
METHYL ISOTHIOCYANATE	<a href="#">METHYL ISOTHIOCYANATE</a>	556-61-6	3	1	1
METHYL MERCAPTAN	<a href="#">METHYL MERCAPTAN</a>	74-93-1	4	4	1
METHYL METHANOATE	<a href="#">METHYL METHANOATE</a>	107-31-3	2 <sup>i</sup>	4	0
METHYL OXIRANE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
METHYL SILANE	<a href="#">METHYL SILANE</a>	992-94-9	3 <sup>h</sup>	4	2
METHYL SULFHYDRATE	<a href="#">METHYL MERCAPTAN</a>	74-93-1	4	4	1
METHYL VINYL ETHER	<a href="#">VINYL METHER ETHER</a>	107-25-5	0 <sup>j</sup>	4	2
METHYLAMINE, ANHYDROUS	<a href="#">METHYLAMINE</a>	74-89-5	3	4	0
METHYLCARBONYL FLUROIDE	<a href="#">ACETYL FLUROIDE</a>	557-99-3	3	0	0
METHYLENE BROMIDE	<a href="#">DIBROMOMETHANE</a>	74-95-3	2 <sup>j</sup>	0	0

METHYLENE CHLORIDE	<a href="#">DICHOLORMETHANE</a>	75-09-2	2 <sup>d</sup>	1	0
METHYLENE DIBROMIDE	<a href="#">DIBROMOMETHANE</a>	74-95-3	2 <sup>i</sup>	0	0
METHYLENE DIBROMIDE	<a href="#">DIBROMOMETHANE</a>	74-95-3	2 <sup>i</sup>	0	0
METHYLENE DICHLORIDE	<a href="#">DICHOLORMETHANE</a>	75-09-2	2 <sup>d</sup>	1	0
METHYLENE GLYCOL	<a href="#">FORMALDEHYDE</a>	50-00-0	4	4	1
METHYLENE OXIDE	<a href="#">FORMALDEHYDE</a>	50-00-0	4	4	1
METHYLETHYLENE OXIDE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
METHYLISOCYANATE	<a href="#">METHYLISOCYANATE</a>	624-83-9	3	4	2
METHYLTOLUENE	<a href="#">ETHYLBENZENE</a>	100-41-4	2 <sup>i</sup>	3	0
MONOBROMOETHENE	<a href="#">BROMOETHENE</a>	593-60-2	2 <sup>d</sup>	4	1
MONOBROMOMETHANE	<a href="#">BROMOMETHANE</a>	74-83-9	3	1	0
MONOCHLOROETHANE	<a href="#">ETHYL CHLORIDE</a>	75-00-3	2 <sup>i</sup>	4	2
MONOCHLOROMETHANE	<a href="#">METHYL CHLORIDE</a>	74-87-3	2 <sup>d</sup>	4	0
MONOETHYLAMINE	<a href="#">ETHYLAMINE</a>	75-0-7	3	4	0
MONOGERMANE	<a href="#">GERMANE</a>	7782-65-2	4	4	3
MONOIODOMETHANE	<a href="#">METHYL IODIDE</a>	74-88-4	3	1	1
MONOMETHYLAMINE	<a href="#">METHYLAMINE</a>	74-89-5	3	4	0
MONOMETHYLSILANE	<a href="#">METHYL SILANE</a>	992-94-9	3h	4	2
MONONITROGEN MONOXIDE	<a href="#">NITRIC OXIDE</a>	10102-43-9	3	0	0
MONOSILANE	<a href="#">SILANE</a>	7803-62-5	2h	4	3
MONOSILYLMETHANE	<a href="#">METHYL SILANE</a>	992-94-9	3h	4	2
MURIATIC ETHER	<a href="#">ETHYL CHLORIDE</a>	75-00-3	2 <sup>i</sup>	4	2
N,N-DIMETHYLMETHANAMINE	<a href="#">TRIMETHYLAMINE</a>	75-50-3	3	4	0
NICKEL CARBONYL	<a href="#">NICKEL CARBONYL</a>	13463-39-3	4	3	3
NICKEL TETRACARBONYL	<a href="#">NICKEL CARBONYL</a>	13463-39-3	4	3	3
NITRETHYL	<a href="#">ETHYL NITRITE</a>	109-95-5	4	4	4
NITRIC OXIDE	<a href="#">NITRIC OXIDE</a>	10102-43-9	3	0	0
NITRILOACETONITRILE	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
NITROGEN DIOXIDE	<a href="#">NITROGEN DIOXIDE</a>	10102-44-0	3	0	0
NITROGEN MONOXIDE	<a href="#">NITRIC OXIDE</a>	10102-43-9	3	0	0
NITROGEN OXYCHLORIDE	<a href="#">NITROSYL CHLORIDE</a>	2696-92-6	3	1	0
NITROGEN PEROXIDE 8	<a href="#">NITROGEN DIOXIDE</a>	10102-44-0	3	0	0
NITROGEN TETROXIDE	<a href="#">NITROGEN TETROXIDE</a>	10544-72-6	3	0	0
NITROGEN TETROXIDE, (LIQUEFIED)	<a href="#">NITROGEN TETROXIDE</a>	10544-72-6	3	0	0
NITROGEN TETROXIDE, GAS	<a href="#">NITROGEN TETROXIDE</a>	10544-72-6	3	0	0
NITROGEN(IV) OXIDE	<a href="#">NITROGEN DIOXIDE</a>	10102-44-0	3	0	0
NITROOYL CHLORIDE	<a href="#">NITROSYL CHLORIDE</a>	2696-92-6	3	1	0
NITRO-SIL	<a href="#">AMMONIA</a>	7664-41-7	3	1	0
NITROSONIUM CHLORIDE	<a href="#">NITROSYL CHLORIDE</a>	2696-92-6	3	1	0
NITROSYL CHLORIDE	<a href="#">NITROSYL CHLORIDE</a>	2696-92-6	3	1	0
NITROUS ACID, ETHYL ESTER	<a href="#">ETHYL NITRITE</a>	109-95-5	4	4	4
OCTAFLUOROISOBUTYLENE	<a href="#">PERFLUOROISOBUTYLENE</a>	382-21-8	b	b	b
OCTAFLUORO-SEC-BUTENE	<a href="#">PERFLUOROISOBUTYLENE</a>	382-21-8	b	b	b
OXACYCLOPROPANE	<a href="#">ETHYLENE OXIDE</a>	75-21-8	3	4	3
OXALIC ACID DINITRILE	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
OXALONITRILE	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
OXALYL CYANIDE	<a href="#">CYANOGEN</a>	460-19-5	4	4	2
OXIRANE	<a href="#">ETHYLENE OXIDE</a>	75-21-8	3	4	3
OXYGEN DIFLUORIDE	<a href="#">OXYGEN DIFLUORIDE</a>	7783-41-7	4	0	2
OXYGEN FLUORIDE	<a href="#">OXYGEN DIFLUORIDE</a>	7783-41-7	4	0	2
OZONE GAS	<a href="#">OZONE</a>	10028-15-6	4	0	2
PENTABORANE	<a href="#">PENTABORANE</a>	19624-22-7	4	4	2
PENTABORON NONAHYDRIDE	<a href="#">PENTABORANE</a>	19624-22-7	4	4	2
PENTAFLUORIDOANTIMONY	<a href="#">ANTIMONY PENTAFLUORIDE</a>	7783-70-2	4	0	1
PENTAFLUORIDOPHOSPHORUS	<a href="#">PHOSPHORUS PENTAFLUORIDE</a>	7647-19-0	3	0	2
PENTAFLUOROIODINE	<a href="#">IODINE PENTAFLUORIDE</a>	7783-66-6	3	0	2
PENTAFLUOROPHOSPHORANE	<a href="#">PHOSPHORUS PENTAFLUORIDE</a>	7647-19-0	3	0	2
PERCHLORO-1,3-BUTADIENE	<a href="#">HEXACHLOROBUTADIENE</a>	87-68-3	4	4	1
PERCHLOROBUTADIENE	<a href="#">HEXACHLOROBUTADIENE</a>	74-90-8	4	4	1
PERCHLORYL FLUORIDE	<a href="#">PERCHLORYL FLUORIDE</a>	7616-94-6	3	2	3
PERFLUORETHYLENE	<a href="#">TETRAFLUROETHENE</a>	116-14-3	2 <sup>d</sup>	4	3
PERFLUORO-2-PROPANONE	<a href="#">HEXAFLUROACETONE</a>	684-16-2	3	0	2
PERFLUROACETONE	<a href="#">HEXAFLUROACETONE</a>	684-16-2	3	0	2
PERFLUROACETONITRILE	<a href="#">TRIFLUOROACETONITRILE</a>	353-85-5	4	0	0
PERFLURODUTADIENE	<a href="#">HEXAFLUROBUTADIENE</a>	685-63-2	3	4	0
PERFLUROISOBUTENE	<a href="#">PERFLUROISOBUTYLENE</a>	382-21-8	b	b	b
PERFLUROISOBUTYLENE	<a href="#">PERFLUROISOBUTYLENE</a>	382-21-8	b	b	b
PFIB	<a href="#">PERFLUROISOBUTYLENE</a>	382-21-8	b	b	b
PHENYLETHANE	<a href="#">ETHYLBENZENE</a>	100-41-4	2 <sup>i</sup>	3	0
PHOSGENE, GAS	<a href="#">PHOSGENE</a>	75-44-5	4	1	0
PHOSHPORUS FLUORIDE	<a href="#">PHOSPHORUS TRIFLUORIDE</a>	7783-55-3	3	0	1
PHOSPHAMINE	<a href="#">PHOSPHINE</a>	7803-51-2	4	4	2
PHOSPHANE	<a href="#">PHOSPHINE</a>	7803-51-2	4	4	2
PHOSPHINE	<a href="#">PHOSPHINE</a>	7803-51-2	4	4	2
PHOSPHORATED HYDROGEN	<a href="#">PHOSPHINE</a>	7803-51-2	4	4	2

PHOSPHOROUS OXYCHLORIDE	<a href="#">PHOSPHORUS OXYCHLORIDE</a>	10025-87-3	4	0	2
PHOSPHOROUS TRICHLORIDE	<a href="#">PHOSPHORUS TRICHLORIDE</a>	7719-12-2	4	0	2
PHOSPHORUS CHLORIDE	<a href="#">PHOSPHORUS OXYCHLORIDE</a>	10025-87-3	4	0	2
PHOSPHORUS CHLORIDE	<a href="#">PHOSPHORUS TRICHLORIDE</a>	7719-12-2	4	0	2
PHOSPHORUS PENTAFLUORIDE	<a href="#">PHOSPHORUS PENTAFLUORIDE</a>	7647-19-0	3	0	2
PHOSPHORUS TRIFLUORIDE	<a href="#">PHOSPHORUS TRIFLUORIDE</a>	7783-55-3	3	0	1
PHOSPHORUS TRIHYDRIDE	<a href="#">PHOSPHINE</a>	7803-51-2	4	4	2
PHOSPHORUS TRIOXYCHLORIDE	<a href="#">PHOSPHORUS OXYCHLORIDE</a>	10025-87-3	4	0	2
PHOSPHORUS(III) CHLORIDE	<a href="#">PHOSPHORUS TRICHLORIDE</a>	7719-12-2	4	0	2
PHOSPHORUS(V) FLUORIDE	<a href="#">PHOSPHORUS PENTAFLUORIDE</a>	7647-19-0	3	0	2
PHOSPHORYL CHLORIDE	<a href="#">PHOSPHORUS OXYCHLORIDE</a>	10025-87-3	4	0	2
PHOSPHORUS HYDRIDE	<a href="#">PHOSPHINE</a>	7803-51-2	4	4	2
PROPENE OXIDE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
PROPYLENE EPOXIDE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
PROPYLENE OXIDE	<a href="#">PROPYLENE OXIDE</a>	75-56-9	3	4	2
PRUSSIC ACID, GAS	<a href="#">HYDROGEN CYANIDE</a>	74-90-8	4	4	1
SELANE	<a href="#">HYDROGEN SELENIDE</a>	7783-07-5	4	4	3
SELENIUM FLUORIDE	<a href="#">SELENIUM HEXAFLUORIDE</a>	7783-79-1	3	0	1
SELENIUM HEXAFLUORIDE	<a href="#">SELENIUM HEXAFLUORIDE</a>	7783-79-1	3	0	1
SELENIUM HYDRIDE	<a href="#">HYDROGEN SELENIDE</a>	7783-07-5	4	4	3
SELENIUM(VI) FLUORIDE	<a href="#">SELENIUM HEXAFLUORIDE</a>	7783-79-1	3	0	1
SILANE	<a href="#">SILANE</a>	7803-62-5	2h	4	3
SILICANE	<a href="#">SILANE</a>	7803-62-5	2h	4	3
SILICIC DICHLORIDE DIHYDRIDE	<a href="#">DICHLOROSILANE</a>	4109-96-0	4h	4	2
SILICOCHLOROFORM	<a href="#">TRICHLOROSILANE</a>	10025-78-2	3	4	2
SILICOETHANE	<a href="#">DISILANE</a>	1590-87-0	0	4h	0
SILICON CHLORIDE	<a href="#">TRICHLOROSILANE</a>	10025-78-2	3	4	2
SILICON FLUORIDE	<a href="#">SILICON TETRAFLUORIDE</a>	7783-61-1	3	0	2
SILICON HEXAHYDRIDE	<a href="#">DISILANE</a>	1590-87-0	0	4h	0
SILICON HYDRIDE	<a href="#">DISILANE</a>	1590-87-0	0	4h	0
SILICON HYDRIDE	<a href="#">SILANE</a>	7803-62-5	2h	4	3
SILICON TETRACHLORIDE	<a href="#">SILICON TETRACHLORIDE</a>	10026-04-7	3	0	2
SILICON TETRAFLUORIDE	<a href="#">SILICON TETRAFLUORIDE</a>	7783-61-1	3	0	2
SILICON TETRAHYDRIDE	<a href="#">SILANE</a>	7803-62-5	2h	4	3
SILICON(IV) CHLORIDE	<a href="#">SILICON TETRACHLORIDE</a>	10026-04-7	3	0	2
SILYLMETHANE	<a href="#">METHYL SILANE</a>	922-94-9	3	4	2
STIBANE	<a href="#">STIBINE</a>	7803-52-3	4	4	2
STIBINE	<a href="#">STIBINE</a>	7803-52-3	4	4	2
SULFANE	<a href="#">HYDROGEN SULFIDE</a>	7783-06-4	4	4	0
SULFONYL FLUORIDE	<a href="#">SULFURYL FLUORIDE</a>	2699-79-8	3	1	0
SULFUR DECAFLUORIDE	<a href="#">SULFUR PENTAFLUORIDE</a>	5714-22-7	4	3	2
SULFUR DIFLUORIDE DIOXIDE	<a href="#">SULFURYL FLUORIDE</a>	2699-79-8	3	1	0
SULFUR DIOXIDE	<a href="#">SULFUR DIOXIDE</a>	7446-09-5	3	0	0
SULFUR HYDRIDE	<a href="#">HYDROGEN SULFIDE</a>	7783-06-4	4	4	0
SULFUR MUSTARD	<a href="#">SULFUR MUSTARD</a>	505-60-2	4	1	1
SULFUR OXIDE	<a href="#">SULFUR DIOXIDE</a>	7446-09-5	3	0	0
SULFUR PENTAFLUORIDE	<a href="#">SULFUR PENTAFLUORIDE</a>	5714-22-7	4	3	2
SULFUR TETRAFLUORIDE	<a href="#">SULFUR TETRAFLUORIDE</a>	7783-60-0	4	1	0
SULFUR(IV) FLUORIDE	<a href="#">SULFUR TETRAFLUORIDE</a>	7783-60-0	4	1	0
SULFUR(IV) OXIDE	<a href="#">SULFUR DIOXIDE</a>	7446-09-5	3	0	0
SULFURATED HYDROGEN	<a href="#">HYDROGEN SULFIDE</a>	7783-06-4	4	4	0
SULFURETED HYDROGEN	<a href="#">HYDROGEN SULFIDE</a>	7783-06-4	4	4	0
SULFURETTED HYDROGEN	<a href="#">HYDROGEN SULFIDE</a>	7783-06-4	4	4	0
SULFUROUS ACID ANHYDRIDE	<a href="#">SULFUR DIOXIDE</a>	7446-09-5	3	0	0
SULFUROUS ANHYDRIDE	<a href="#">SULFUR DIOXIDE</a>	7446-09-5	3	0	0
SULFUROUS OXIDE	<a href="#">SULFUR DIOXIDE</a>	7446-09-5	3	0	0
SULFURYL DIFLUORIDE	<a href="#">SULFURYL FLUORIDE</a>	2699-79-8	3	1	0
SULFURYL FLUORIDE	<a href="#">SULFURYL FLUORIDE</a>	2699-79-8	3	1	0
SULPHURYL FLUORIDE	<a href="#">SULFURYL FLUORIDE</a>	2699-79-8	3	1	0
TELLURIUM FLUORIDE	<a href="#">TELLURIUM HEXAFLUORIDE</a>	7783-80-4	4	0	2
TELLURIUM HEXAFLUORIDE	<a href="#">TELLURIUM HEXAFLUORIDE</a>	7783-80-4	4	0	2
TETRACARBONYLNICKEL	<a href="#">NICKEL CARBONYL</a>	13463-39-3	4	3	3
TETRACHLOROSILANE	<a href="#">SILICON TETRACHLORIDE</a>	10026-04-7	3h	0	2
TETRAFLUROETHENE	<a href="#">TETRAFLUROETHENE</a>	116-14-3	2 <sup>d</sup>	4	3
TETRAFLUOROSILANE	<a href="#">SILICON TETRAFLUORIDE</a>	7783-61-1	3h	0	2
TETRAFLUOROSULFURANE	<a href="#">SULFUR TETRAFLUORIDE</a>	7783-60-0	4	1	0
TFE	<a href="#">TETRAFLUROETHENE</a>	116-14-3	2 <sup>d</sup>	4	3
TILDENS REAGENT	<a href="#">NITROSYL CHLORIDE</a>	2696-92-6	3	1	0
TRIATOMIC OXYGEN	<a href="#">OZONE</a>	10028-15-6	4	0	2
TRIBOROMBORANE	<a href="#">BORON TRIBROMIDE</a>	10294-33-4	4	2	0
TRICHLOROMETHYL CHLOROFORMATE	<a href="#">DIPHOSGENE</a>	503-38-8	4	0	0
TRICHLOROSILANE	<a href="#">TRICHLOROSILANE</a>	10025-78-2	3	4	2
TRIEMTHYLSILANE	<a href="#">TRIMETHYLSILANE</a>	993-07-7	2 <sup>j</sup>	4	1
TRIFLUOROACETONITRILE	<a href="#">TRIFLUOROACETONITRILE</a>	353-85-5	4	0	0
TRIFLUOROACETYL CHLORIDE	<a href="#">TRIFLUOROACETYL CHLORIDE</a>	354-32-5	3	0	0
TRIFLUOROARSANE	<a href="#">ARSENIC TRIFLUORIDE</a>	7784-35-2	3	0	1

TRIFLUOROBORANE	<a href="#">BORON TRIFLUORIDE</a>	7637-07-2	4	0	1
TRIFLUOROPHOSPHINE	<a href="#">PHOSPHORUS TRIFLUORIDE</a>	7783-55-3	3	0	1
TRIHYDRIDOARSENIC	<a href="#">ARSINE</a>	7784-42-1	4	4	2
TRIHYDROGEN NITRIDE	<a href="#">AMMONIA</a>	7664-41-7	3	1	0
TRIMETHYLAMINE	<a href="#">TRIMETHYLAMINE</a>	75-50-3	3	4	0
TRIMETHYLBORANE	<a href="#">TRIMETHYLBORANE</a>	593-90-8	4	4	3
TRIMETHYLBORINE	<a href="#">TRIMETHYLBORANE</a>	593-90-8	4	4	3
TRIMETHYLBORON	<a href="#">TRIMETHYLBORANE</a>	593-90-8	4	4	3
TRIMETHYLSILYL HYDRIDE	<a href="#">TRIMETHYLSILANE</a>	993-07-7	2 <sup>i</sup>	4	1
TRIOXYCHLOROFUORIDE	<a href="#">PERCHLORYL FLUORIDE</a>	7616-94-6	3	2	3
TRIOXYGEN	<a href="#">OZONE</a>	10028-15-6	4	0	2
TUNGSTEN HEXAFLUORIDE	<a href="#">TUNGSTEN HEXAFLUORIDE</a>	7783-82-6	4	0	2
VIKANE	<a href="#">SULFURYL FLUORIDE</a>	2699-79-8	3	1	0
VINYL BROMIDE	<a href="#">BROMOETHENE</a>	593-60-2	2 <sup>d</sup>	4	1
VINYL CHLORIDE	<a href="#">VINYL CHLORIDE</a>	75-01-4	2 <sup>d</sup>	4	2
VINYL FLUORIDE	<a href="#">FLUROETHENE</a>	75-02-5	2 <sup>d</sup>	4	2
VINYL METHYL ETHER	<a href="#">VINYL METHER ETHER</a>	107-25-5	0 <sup>j</sup>	4	2
VINYLETHYLENE	<a href="#">1.3-BUTADIENE</a>	106-99-0	2 <sup>d</sup>	4	0
WOLFRAM HEXAFLUORIDE	<a href="#">TUNGSTEN HEXAFLUORIDE</a>	7783-82-6	4	0	2
XYLENE, GAS	<a href="#">XYLENE</a>	1330-20-7	2 <sup>i</sup>	3	0

a = on multiple university toxic gas lists, no MSDS available

b = LC<sub>50</sub> between 17-300ppm, see [http://www.epa.gov/oppt/aegl/pubs/perfluoroisobutylene\\_interim\\_sept\\_2010.pdf](http://www.epa.gov/oppt/aegl/pubs/perfluoroisobutylene_interim_sept_2010.pdf)

c = as a cryogen hazard, not a toxic hazard - SOP required for atypical use only

d = low health rating, but known or suspected carcinogen

e = poor warning properties

f= LC50 is 1ppm, see [http://www.msds-al.co.uk/assets/file\\_assets/SDS\\_074-CLP-HYDROGEN%20TELLURIDE.pdf](http://www.msds-al.co.uk/assets/file_assets/SDS_074-CLP-HYDROGEN%20TELLURIDE.pdf)

g=LC50 is 10ppm, see CGA P-20 Table 3

h=pyrophoric

i = on Airgas restricted sales list

j = peroxide former