

Substance		Explosion Prevention						
Designation	Chemical Formula	L.E.L. / Vol.- %	U.E.L. / Vol.- %	Flash Point / °C	Ignition Temperature / °C	Temperature Class	Group	Relative Density air = 1
Acetic acid	CH3COOH	4.0	17.0	40	464	T1	IIA	---
Acetone	CH3COCH3	2.5	13.0	-38	535	T1	IIA	2.00
Acetonitrile	CH3CH	3.0	16.0	2	523	T1	IIA	1.42
Ammonia	NH3	15.0	33.6	-	630	T1	IIA	0.59
Argon	Ar	-	-	-	-	-	-	1.38
Arsin	AsH3	3.9	77.8	-	285	-	-	2.69
Benzene	C6H6	1.2	8.6	-11	560	T1	IIA	2.70
Boron trichloride	BCl3	-	-	-	-	-	-	4.05
Boron trifluoride	BF3	-	-	-	-	-	-	2.37
Bromo	Br2	-	-	-	-	-	-	5.52
Bromomethane (R40)	CH3Br	6.7	11.3	<-20	511	T1	IIA	3.76
Butane, n- (Isobutane)	C4H10	1.4	9.3	-80	372	T2	IIA	2.05
Butane-1-ol	C4H9OH	1.7	12.0	29	359	T2	IIA	2.56
Butane-2-ol	C4H9OH	1.7	9.8	24	405	T2	IIA	2.56
Butanone (MEK)	CH3COC2H5	1.8	10.0	-9	404	T2	IIB	2.49
Butyl acetate, n-	CH3COOC4H9	1.3	7.5	22	370	T2	IIA	4.01
Carbon Dioxide	CO2	-	-	-	-	-	-	1.53
Carbon Monoxide	CO	10.9	74.0	-	805	T1	IIB	0.97
Carbonyl chloride	COCL2	-	-	-	-	-	-	3.50
Chlorine	Cl2	-	-	-	-	-	-	2.45
Chlorine dioxide	ClO2	-	-	-	-	-	-	2.33
Cyclohexane	C6H12	1.2	8.3	18	259	T3	IIA	2.90
Cyclopentane	C5H10	1.4	8.0	-37	320	T2	IIA	2.42
Diborane	B2H6	-	-	-	-	-	-	0.96
Dichloromethane	CH2Cl2	13.0	22.0	-	556	T1	IIA	2.93
Dichlorotrifluoroethane (R123)	C2HCl2F3	-	-	-	-	-	IIA	5.28
Diethyl ether	C2H5OC2H5	1.7	36.0	-45	160	T4	IIB	1.63
Difluoroethane, 1,1-(R152a)	C2H4F2	-	-	-	-	-	-	2.33
Dimethyl ether	CH2OCH4	2.7	32.0	-42	240	T3	IIB	1.63
Ethane	C2H6	2.5	15.5	-	515	T1	IIA	1.04
Ethanethiol	C2H6S	2.8	18.0	<-20	295	T3	IIB	2.15
Ethanol	C2H5OH	3.1	19.0	12	363	T2	IIA	1.59
Ethene (Ethylene)	C2H4	2.3	36.0	-	425	T2	IIB	0.97
Ethine (Acetylene)	C2H2	2.3	100.0	-	305	T2	IIC	0.91
Ethyl acetate	CH3COOC2H5	2.2	11.0	-4	460	T1	IIA	3.04
Ethylene oxide (ETO)	C2H4O	2.6	100.0	<-18	435	T2	IIB	1.52
Fluorine	F2	-	-	-	-	-	-	1.31
German	GeH4	-	-	-	-	-	-	---

German Designation	Chemical Formula	L.E.L. / Vol.-%	U.E.L. / Vol.-%	Flash Point / °C	Ignition Temperature / °C	Temperature Class	Group	Relative Density air = 1
Heptane, n-	C7H16	1.1	6.7	-4	215	T3	IIA	3.46
Hexane, n-	C6H14	1.0	8.4	-21	233	T3	IIA	2.79
Hydrogen	H2	4.0	77.0	-	560	T1	IIC	0.07
Hydrogen chloride	HCl	-	-	-	-	-	-	0.93
Hydrogen cyanide	HCN	5.4	46.0	< -20	538	T1	IIB	0.95
Hydrogen fluoride	HF	-	-	-	-	-	-	0.69
Hydrogen sulphide	H2S	4.0	5.5	-	270	T3	IIB	1.19
Isopropyl acetate	CH3COOC3H7	1.8	8.1	4	467	T1	IIA	3.53
Kerosene		0.7	5.0	38	210	T3	IIA	---
Methane	CH4	4.4	17.0	-	537	T1	IIA	0.55
Methanol	CH3OH	5.5	38.0	11	386	T2	IIA	1.11
Methyl acetate	CH3COOCH3	3.2	16.0	-10	502	T1	IIA	2.56
Monochlorinedifluoromethane (R22)	CHClF2	-	-	-	-	-	-	2.99
Nitrogen	N2	-	-	-	-	-	-	1.00
Nitrogen dioxide	NO2	-	-	-	-	-	-	1.59
Nitrogen monoxide	NO	-	-	-	-	-	-	1.04
Nonane, n-	C9H20	0.7	5.6	30	205	T3	IIB	5.71
Octane	C8H18	0.8	6.5	13	206	T3	IIA	3.94
Oxygen	O2	-	-	-	-	-	-	1.00
Ozone	O3	-	-	-	-	-	-	1.66
Pentane	C5H12	1.4	7.8	-40	258	T3	IIA	2.49
Phosphorus hydrogen (Phosphine)	PH3	1.0	-	-	100	-	-	1.18
Phosphorus trichloride	PCL3	-	-	-	-	-	-	4.74
Propane	C3H8	1.7	10.9	-104	470	T1	IIA	1.55
Propanol, 1-	C3H7OH	2.2	17.5	22	405	T2	IIB	2.08
Propanol, 2-	C3H7OH	2.0	12.7	12	425	T2	IIA	2.08
Propene (Propylene)	C3H6	2.0	11.0	-	455	T1	IIA	1.48
Propylene oxide	C3H6O	1.9	24.0	-37	420	T2	IIB	2.01
Stibine	SbH3	-	-	-	-	-	-	4.31
Styrene	C8H8	1.1	8.0	30	490	T1	IIA	3.59
Sulphur dioxide	SO2	-	-	-	-	-	-	2.21
Sulphur hexafluoride	SF6	-	-	-	-	-	-	5.04
Tetrafluoroethane (R143a)	C2H2F4	-	-	-	-	-	-	3.45
Tetrahydrofuran (THF)	C4H8O	1.5	12.4	-20	224	T3	IIB	3.53
Toluene	C7H8	1.1	7.6	4	535	T1	IIA	3.18
Xylenes	C8H10	1.0	7.6	30	464	T1	IIA	3.67