

Properties of Flammable Liquids and Gases:

Name	Formula	TWA (OSHA PEL)	Flash Point F		Explosive Limits		Ignition Temp., F	Specific Gravity	Vapor Density
			Closed Cup	Open Cup	LEL %	UEL %			
1,3- Butadiene	CH ₂ =CHCH=CH ₂	1 ppm	Gas	Gas	2.0	12.0	788	---	1.90
Acetaldehyde	CH ₃ CHO	200 ppm	-38	.....	4.0	60.0	347	0.78	1.52
Acetic Acid (glacial)	CH ₃ COOH	10 ppm	103	135	4.0	19.9	867	1.05	2.07
Acetone	CH ₃ COCH ₃	1000 ppm	-4	15	2.5	13.0	869	0.79	2.00
Acetonitrile	CH ₃ CN	40 ppm	42	42	3	16	975	0.79	1.42
Acrylonitrile	CH ₂ =CHCN	2 ppm	.....	32	3.0	17.0	898	0.80	1.83
Ammonia (anhydrous)	NH ₃	50 ppm	Gas	Gas	15.0	28.0	1204	.7 @ - 33°C	0.60
Amyl acetate-n	CH ₃ COO[CH ₂] ₄ CH ₃	100 ppm	76	80	1.1	7.5	714	0.88	4.49
Amylamine (mono)	C ₅ H ₁₁ NH ₂		30	45	2.2	22	.....	0.77	3.01
Benzene	C ₆ H ₆	1 ppm	12	.....	1.2	7.8	928	0.89	2.77
Butane-n	CH ₃ CH ₂ CH ₂ CH ₃	----	-76	Gas	1.9	8.5	550	0.60	2.06
Butene-1	CH ₃ CH ₂ CH:CH ₂	----	Gas	Gas	1.6	10.0	725	0.60	1.94
Butyl acetate-n	CH ₃ COO[CH ₂] ₃ CH ₃	150 ppm	72	90	1.7	7.6	797	0.88	4.00
Butyl alcohol-n	CH ₃ CH ₂ CH ₂ CH ₂ OH	100 ppm	98	110	1.4	11.2	650	0.81	2.55
Butyl alcohol-sec	CH ₃ CH(OH)CH ₂ CH ₃	150 ppm	75	85	1.7 @ 212°F	9.8 @ 212°F	761	0.81	2.55
Butyl alcohol-tert	(CH ₃) ₃ COH	100 ppm	52	60	2.4	8.0	892	0.79	2.55
Cyclohexane	C ₆ H ₁₂	300 ppm	-4	.....	1.3	8	473	0.80	2.90
Decane-n	CH ₃ (CH ₂) ₈ CH ₃	----	115	.....	0.8	5.4	410	0.70	4.90
Diethyl ether	C ₂ H ₅ OC ₂ H ₅	400 ppm	-49	.....	1.9	36.0	356	0.72	2.55
Dimethylamine, anhydrous	(CH ₃) ₂ NH	10 ppm	Gas	Gas	2.8	14.4	752	----	1.60
Dimethylformamide	HCON(CH ₃) ₂	10 ppm	136	155	2.2 @ 212° F	15.2	833	0.90	2.52
Dioxane-p	C ₄ H ₈ O ₂	100 ppm	54	75	2	22	356	1.0+	3.00
Dodecane-n	CH ₃ (CH ₂) ₁₀ CH ₃	----	165	.....	0.6	.....	397	0.75	5.86
Ethane	CH ₃ CH ₃	----	Gas	Gas	3.0	12.5	882	.....	1.04
Ethyl alcohol	CH ₃ CH ₂ OH	1000 ppm	55	71	3.3	19.0	685	0.79	1.59
Ethyl benzene	CH ₃ CH ₂ C ₆ H ₅	100 ppm	70	75	0.8	6.7	810	0.87	3.66
Ethyl ether	C ₂ H ₅ OC ₂ H ₅	400 ppm	-49	.....	1.9	36.0	356	0.72	2.55

Ethylamine	CH ₃ CH ₂ NH ₂	10 ppm	1	.....	3.5	14.0	725	0.80	1.60
Ethylene	H ₂ C:CH ₂	----	Gas	Gas	2.7	36.0	842		0.98
Ethylene oxide	C ₂ H ₄ O	1 ppm	-20	-4	3.0	100.0	1058	0.89	1.52
Formaldehyde gas	HCHO	.75 ppm	Gas	Gas	7.0	73.0	795	.....	1.00
Gasoline, aviation-commercial		----	-50	.....	1.3	7.1	824	.....	.....
Gasoline, aviation-military		----	-50	.....	1.2	7.1	880	.....	.....
Heptane-n	CH ₃ [CH ₂] ₅ CH ₃	500 ppm	25	30	1.1	6.7	399	0.70	3.50
Hexane-n	CH ₃ [CH ₂] ₄ CH ₃	500 ppm	-7	-14	1.1	7.5	437	0.70	3.00
Hydrogen	H ₂	----	Gas	Gas	4.0	75.0	932	.....	0.10
Isoprene	CH ₂ :C[CH ₃]CH:CH ₂	----	-65	.....	1.5	8.9	743	0.70	2.40
Isopropyl alcohol	[CH ₃] ₂ CHOH	400 ppm	53	60	2.0	12.7 @ 200°F	750	0.79	2.07
Isopropyl ether	[CH ₃] ₂ CHOCH[CH ₃] ₂	500 ppm	-18	-15	1.4	7.9	830	0.73	3.52
Isopropylamine	[CH ₃] ₂ CHNH ₂	5 ppm	----	-35	----	----	756	0.69	2.00
Jet fuel, JP-4			-10 to +30	.....	1.3	8.0	464	----	----
Methane	CH ₄		Gas	Gas	5.0	15.0	999	.....	0.55
Methyl alcohol	CH ₃ OH	200 ppm	52	60	6.0	36.0	867	0.79	1.11
Methyl ethyl ketone	CH ₃ COCH ₂ CH ₃	200 ppm	16	24	1.4 @ 200	11.4 @ 200	759	0.81	2.48
Methyl methacrylate	CH ₂ =C(CH ₃)COOCH ₃	100 ppm	50	50	1.7	8.2	.....	0.94	3.60
Naphtha		100 ppm	100-110	.....	0.8	5.0	440-500	0.80	.....
Octane-n	CH ₃ (CH ₂) ₆ CH ₃	500 ppm	56	.....	1.0	6.5	403	0.70	3.86
Pentane-n	CH ₃ (CH ₂) ₃ CH ₃	1000 ppm	<-40	.....	1.5	7.8	500	0.63	2.48
Propane	CH ₃ CH ₂ CH ₃	1000 ppm	Gas	Gas	2.1	9.5	842	---	1.56
Propyl acetate-n	CH ₃ COOCH ₂ CH ₂ CH ₃	200 ppm	55	70	1.7 @ 100°F	8.0	842	0.89	3.52
Propyl alcohol-iso	[CH ₃] ₂ CHOH	400 ppm	53	60	2.0	12.7 @ 200°F	750	0.79	2.07
Propyl alcohol-n	CH ₃ CH ₂ CH ₂ OH	200 ppm	74	85	2.2	13.7	775	0.80	2.07
Propylamine-n	CH ₃ (CH ₂) ₂ NH ₂	---	-35	.....	2.0	10.4	604	0.72	2.03
Propylbenzene-n	C ₃ H ₇ C ₆ H ₅	---	86	.....	0.8	6	842	0.90	4.14
Propylene	CH ₂ :CHCH ₃	---	Gas	Gas	2.0	11.1	851	---	1.49
Propylene oxide	C ₃ H ₆ O	100 ppm	-35	.....	2.3	36.0	840	0.83	2.00
Styrene	C ₆ H ₅ CH=CH ₂	100 ppm	88	100	0.9	6.8	914	0.91	3.60
Tetradecane-n	CH ₃ (CH ₂) ₁₂ CH ₃	---	212	.....	0.5	.....	392	0.77	6.83

Tetrahydrofuran	C ₄ H ₈ O	200 ppm	6	5	2.0	11.8	610	0.89	2.50
Tetrahydrofurfuryl alcohol	C ₄ H ₇ OCH ₂ OH	---	167	167	1.5	9.7	540	1.06	3.52
Toluene	C ₆ H ₅ CH ₃	200 ppm	40	45	1.1	7.1	896	0.87	3.14
Triethylamine	(C ₂ H ₅) ₃ N	25 ppm	---	16	1.2	8.0	480	0.73	3.48
Trimethylamine	(CH ₃) ₃ N	---	Gas	Gas	2.0	11.6	374	---	2.03
Vinyl acetate	CH ₂ =CHOOCC ₂ H ₅	---	18	30	2.6	13.4	756	0.90	2.97
Vinyl Chloride	CH ₂ =CHCl	1 ppm		-108	3.6	33.0	882	0.91	2.20
Vinyl ethyl ether	CH ₂ =CHOC ₂ H ₅	---	<-50	.....	1.7	28.0	395	0.75	2.50
Xylene-m	C ₆ H ₄ (CH ₃) ₂	100 ppm	81	.....	1.1	7.0	982	0.87	3.66
Xylene-o	C ₆ H ₄ (CH ₃) ₂	100 ppm	90	75	0.9	6.7	867	0.89	3.66
Xylene-p	C ₆ H ₄ (CH ₃) ₂	100 ppm	81	.....	1.1	7.0	984	0.87	3.66