Combustible	Formula	Mol wt	Sp gr (air = 1)	BP, °C	C_{st} (in air), vol pct	ΔH_f (25°C), kcal/mol	ΔH_c (net, 25°C), kcal/mol	Flash-point, °C	Minimum AIT, °C	Flammable limits	
										L_{25}, vol pct	U_{25}, vol pct
ALCOHOLS (GLYCOLS) — continued											
Triethylene glycol	$C_6H_{12}O_2(OH)_2$	150.17	5.17	278	2.72	−191.4(l)	777	156	371	[10]0.9	[9]9.2
Glycerol (1,2,3-propanetriol)	$C_3H_5(OH)_3$	92.11	3.17	290	5.65	−159.8(l)	354	160	370	NA	NA
ALCOHOLS (UNSATURATES AND AROMATICS)											
Propargyl alcohol (2-propynol)	C_3H_3OH	56.07	1.93	114	5.65	10.1	408	36 oc	NA	[4]2.2	[7]14
Allyl alcohol (2-propenol)	C_3H_5OH	58.08	2.0	97	4.97	−31.6	424	21	378	2.5	18
Aldol (3-hydroxybutanal)	$C_2H_4OHC_2H_3O$	88.12	3.0	NA	4.02	−102.9(l)	504	66 oc	250	[2]2.0	NA
Furfuryl alcohol	$CH_2OHC_4H_3O$	98.10	3.4	171	3.67	−66.1(l)	578	75 oc	390	[3]1.8	[7]16
Phenol (carbolic acid)	C_6H_5OH	94.11	3.2	182	2.90	−23.0	715	79	NA	NA	NA
Benzyl alcohol	C_7H_7OH	108.15	3.72	205	2.40	−38.5(l)	851	101	436	NA	NA
m-Cresol (3-methylphenol)	C_7H_7OH	108.15	3.7	202	2.40	−31.6	858	94	559	[10]1.1	NA
ETHERS (ALKYLS)											
Methyl ether (dimethyl ether)	$(CH_3)_2O$	46.07	1.59	−23	6.53	−44.0	316	NA	350	3.4	27
Methyl ethyl ether	$CH_3OC_2H_5$	60.10	2.1	11	4.44	−51.7	462	−37	190	2.0	10
Ethyl ether (diethyl ether)	$C_2H_5)_2O$	74.12	2.56	35	3.37	−60.3	605	−45	160	1.9	36
Ethyl propyl ether	$C_2H_5OC_3H_7$	88.15	3.28	64	2.72	NA	750	−20	NA	1.7	9
Isopropyl ether	$(C_3H_7)_2O$	102.18	3.53	68	2.27	−76.2	893	−28	NA	1.4	7.9
Butyl ether	$(C_4H_9)_2O$	130.22	4.5	142	1.72	−79.8	1,193	25	194	1.5	[6]7.6
Amyl ether (dipentyl ether)	$(C_5H_{11})_2O$	158.29	5.5	190	1.38	−82.5(l)	1,494	57 oc	170	[2]7	NA
Hexyl ether	$(C_6H_{13})_2O$	186.34	5.5	223	1.15	NA	NA	77 oc	185	[2].6	NA
ETHERS (UNSATURATES AND MISCELLANEOUS)											
Ethylene oxide (epoxyethane)	C_2H_4O	44.05	1.5	14	7.72	−12.6	291	NA	429	3.6	100
Propylene oxide	C_3H_6O	58.08	2.0	34	4.97	−22.2	433	−37	464	2.8	37
Methyl vinyl ether	$CH_3OC_2H_3$	58.08	2.0	12	4.97	NA	411	NA	287	2.6	39
Vinyl ether (diethenyl ether)	$(C_2H_3)_2O$	70.09	2.42	28	4.02	−3.0	547	NA	360	1.7	27
Furan (epoxybutadiene)	C_4H_4O	68.07	2.3	31	4.44	−8.3	484	NA	NA	2.3	14.3
Tetrahydrofuran (epoxybutane)	C_4H_8O	72.10	2.5	67	3.67	−44.0	563	−14	321	2.0	NA
p-Dioxane (diethylene dioxide)	$(C_2H_4O)_2$	88.12	3.0	101	4.02	−75.3	532	12	265	2.0	22
Trioxane (metaformaldehyde)	$(CH_2O)_3$	90.08	NA	115	6.53	−124.4(s)	331	45 oc	414	[6]3.6	[6]29
Acetal	$C_2H_4(OC_2H_5)_2$	118.18	4.1	103	2.40	−117.2(l)	852	37	230	1.6	10
Phenyl ether	$(C_6H_5)_2O$	170.21	5.86	258	1.47	−3.5(l)	1,414	115	620	[2].8	NA
ETHERS (CELLOSOLVES)											
Methyl cellosolve (2-methoxyethanol)	$CH_3OC_2H_4OH$	76.11	2.6	125	4.97	−114.8	399	46	380	[8]2.5	[10]20
Ethyl cellosolve	$C_2H_5OC_2H_4OH$	90.12	3.0	135	3.67	NA	NA	94	235	[6]1.8	[6]14
Butyl cellosolve	$C_4H_9OC_2H_4OH$	118.18	4.08	171	2.40	NA	NA	71	245	[10]1.1	[9]11
ALDEHYDES (ALKYLS)											
Formaldehyde (methanal)	HCHO	30.03	1.0	−20	17.32	−27.7	124	NA	430	7.0	73
Acetaldehyde (ethanal)	CH_3CHO	44.05	1.52	21	7.73	−39.8	264	−38	175	4.0	60
Propionaldehyde	C_2H_5CHO	58.08	2.01	49	4.97	−45.9	409	−7 oc	207	2.9	17
Butyraldehyde	C_3H_7CHO	72.12	2.5	76	3.67	−49.0	558	−7	230	2.5	12.5
ALDEHYDES (MISCELLANEOUS)											
Acrolein (2-propenal)	C_2H_3CHO	56.07	1.90	53	5.64	−25.1(l)	373	−26	235	2.8	31
Crotonaldehyde (2-butenal)	C_3H_5CHO	70.09	2.4	104	4.02	−34.5(l)	515	13	232	2.1	[3]16
Furaldehyde	$(C_4H_3O)CHO$	96.09	3.3	162	4.02	−46.6(l)	539	60	316	[6]2.1	[6]19.3
Benzaldehyde	C_6H_5CHO	106.13	3.7	178	2.55	−18.5(l)	813	64	192	NA	NA
Paraldehyde (paraacetaldehyde)	$(CH_3CHO)_3$	132.16	4.56	128	2.72	−164.2(l)	747	36 oc	238	1.3	NA
KETONES (ALKYLS)											
Acetone (propanone)	$(CH_3)_2CO$	58.08	2.01	56	4.97	−52.0	403	−18	465	2.6	13
Methyl ethyl ketone (2-butanone)	$CH_3COC_2H_5$	72.12	2.49	80	3.67	−57.0	548	−6	516	1.9	11

See footnotes on page 77.

Kuchta, J. M. (1985). **Investigation of fire and explosion accidents in the chemical, mining, and fuel-related industries-a manual.** Bulletin 680, U.S. Bureau of Mines.