Substance	Molecular Weight	NEC Gas Group	Ignition Temp (F)	Lower Heating Value (Btu/CF)	Lower Heating Value (Btu/Lb)	Specific Gravity (Air=1)	Lbs per CF	CF per Lb
Acetaldehyde	44	C	365			1.5	0.1100	8.71
Acetone	58	D	1000			2.0	0.1500	6.53
Acetylene - C2H2	26.030	A	571	1438	20617	0.901	0.0686	14.560
Air	28.9	-	-	-	-	1	0.0766	13.063
Ammonia - NH3	17.031	D	1204	365.1	8001	0.5961	0.0456	21.914
Amyl Alcohol	87	D	572			3.0		
Argon - A	39.948	-	-	-	-	1.3775	0.1054	9.487
Benzene - C6H6	78.180	D	1044	3780	18341	2.705	0.2063	4.848
Butadiene	54	BD**	804			1.9		
n-Butane - C4H10	58.120	D	723	3142	19815	2.0665	0.1582	6.321
Isobutane - C4H10	58.120	D	864	3105	19529	2.0665	0.1582	6.321
n-Butene - C4H8	56.104	D	723	2990	20203	1.941		
Butylene - C4H8	56.104	D	723	2990	20203	1.941		
Isobutene - C4H8	56.104	D	615	2980	20135	1.941		
Carbon - C *	12.01	-	-	-	14093	-	-	-
Carbon Dioxide - CO2	44.01	-	-	-	-	1.5282	0.1170	8.548
Carbon Monoxide - CO	28.01	C	1128	321.6	4323	0.9672	0.0740	13.506
Carbon Disulfide - CS2	76.130	***	212	1205	5380	2.634		
Cyclopropane		C	928			1.5		
Di-ethyl ether		C	356			2.6		
Dimethyl hydrazine		C	480			2.0		
Ethane - C2H6	30.068	D	959	1639	20394	1.0488	0.0803	12.455
Ethyl Alcohol - C2H5OH	40.067	D	793	1450	11929	1.39		
Ethyl Chloride - C2H5Cl	64	D	966	1504	8907	2.2		
Ethylene - C2H4	28.052	C	842	1514	20298	1.5		
Ethylene Oxide	44	B	804			1		
n-Hexane - C6H14	86.169	D	502	4412	19403	2.97		
Hydrogen - H2	2.016	B	1085	274.9	51605	0.0696	0.00533	187.723
Hydrogen Cyanide - HCN	27.010	C	1000	276	10220	0.93		
Hydrogen Sulfide - H2S	34.076	C	500	596	6545	1.17		
Methane - CH4	16.042	D	999	914.5	21537	0.5543	0.0425	23.852

Methyl Alcohol - CH3OH	32.041	D	876	768	9078	1.10		
Methyl Chloride - CH3Cl	50.488		1170	766.5	5911	1.74		
Methyl Disulfide - C2H6S2	94.20			2326	9359	3.25		
Methyl Ether		C						
Methyl Mercaptan	49	C				1.7		
Methyl Sulfide - C2H6S	62.13		403	1975	12049	2.14		
Napthalene - C10H8	128.16	D	979	5654	16708	4.42		
Natural Gas	19.463	D	900	957	19800	0.67		
Nitrogen - N2	28.016	-	-	-	-	0.9718	0.0744	13.443
Octane	114	D	428			3.90		
Octene		D						
Oxygen - O2	32	-	-	-	-	1.1053	0.0846	11.819
Propane - C3H8	44.094	D	871	2372	19807	1.5617	0.1196	8.365
n-Pentane - C5H12	72.146	D	588	3900	20485	2.49		
Isopentane - C5H12	72.146	D	788	3716	19478	2.49		
Neopentane - C5H12	72.146	D	842	3603	19396	2.49		
n-Pentene - C5H10	70.130	D	523	3750	20211	2.42		
Propylene - C3H6	42.078	D	927	2233	20115	1.45		
Propylene Oxide	58.1	B	840			2.0		
Propyl Alcohol	61	D	700			2.1		
Isopropyl Acetate - C5H10O2	102.13	D	860	3017	11196	3.534	0.2695	3.711
Styrene	104	D	914			3.6		
Sulfur - S *	32.06	-	-	-	3983	-	-	-
Sulfur Dioxide - SO2	64.06	-	-	-	-	2.217	0.1690	5.9163
Toluene - C7H8	92.134	D	997	4550	18716	3.18		
Turpentine		D	488					
Vinyl Chloride	64	D	882			2.2		
Water Vapor - H2O	18.016	-	-	-	-	0.6234	0.0475	21.037
Xylene - C8H10	106.153	D	867	4980	17760	3.673	0.2801	3.570

Notes: All gas volumes at 60 degr F and 30 inches Hg.

* -- Carbon and Sulfur are solids at these conditions.
** -- Butadiene shows characteristics of both Groups B & D gases -- SPECIAL.
*** -- Carbon Disulfide needs additional protection beyond its class due to very low ignition temperature.