Gas	Formula	Molecular weight	Density - ρ -	
			kg/m^3	lb_m/ft^3
Acetylene (ethyne)	C_2H_2	26	1.092[1)] 1.170[2)]	0.0682[1)] 0.0729[2)]
Air		29	1.205[1)] 1.293[2)]	0.0752[1)] 0.0806[2)]
Ammonia	NH_3	17.031	0.717[1)] 0.769[2)]	0.0448[1)] 0.0480[2)]
Argon	Ar	39.948	1.661[1)]	0.1037[1)]
Benzene	C_6H_6	78.11	3.486	0.20643
Blast furnace gas			1.250[2)]	0.0780[2)]
Butane	C_4H_{10}	58.1	2.489[1)] 2.5[2)]	0.1554[1)] 0.156[2)]
Butylene (Butene)	C_4H_8	56.11	2.504	0.148[2)]
Carbon dioxide	CO_2	44.01	1.842[1)] 1.977[2)]	0.1150[1)] 0.1234[2)]
Carbon disulphide		76.13		
Carbon monoxide	CO	28.01	1.165[1)] 1.250[2)]	0.0727[1)] 0.0780[2)]
Carbureted Water Gas				0.048
Chlorine	Cl_2	70.906	2.994[1)]	0.1869[1)]
Coke Oven Gas				0.034[2)]
Combustion products			1.11[2)]	0.069[2)]

Cyclohexane		84.16		
Digester Gas (Sewage or Biogas)				0.062
Ethane	C_2H_6	30.07	1.264[1)]	0.0789[1)]
Ethyl Alcohol		46.07		
Ethyl Chloride		64.52		
Ethylene	C_2H_4	28.03	1.260[2)]	0.0786[2)]
Helium	He	4.02	0.1664[1)]	0.01039[1)]
N-Heptane		100.20		
Hexane		86.17		
Hydrogen	H_2	2.016	0.0899[2)]	0.0056[2)]
Hydrochloric Acid		36.47		
Hydrogen Chloride	HCl	36.5	1.528[1)]	0.0954[1)]
Hydrogen Sulfide	H_2S	34.076	1.434[1)]	0.0895[1)]
Methane	CH_4	16.043	0.668[1)] 0.717[2)]	0.0417[1)] 0.0447[2)]
Methyl Alcohol		32.04		
Methyl Butane		72.15		
Methyl Chloride		50.49		
Natural gas		19.5	0.7 - 0.9[2)]	0.044 - 0.056[2)]

Neon	Ne	20.179		0.052
Nitric oxide	NO	30.0	1.249[1)]	0.0780[1)]
Nitrogen	N_2	28.02	1.165[1)] 1.250[2)]	0.0727[1)] 0.0780[2)]
Nitrogen Dioxide	NO_2	46.006		
N-Octane		114.22		
Nitrous Oxide	N_2O	44.013		0.114
Nitrous Trioxide	NO_3	62.005		
Oxygen	O_2	32	1.331[1)] 1.429[2)]	0.0831[1)] 0.0892[2)]
Ozone	O_3	48.0		0.125
N-Pentane		72.15		
Iso-Pentane		72.15		
Propane	C_3H_8	44.09	1.882[1)]	0.1175[1)]
Propene (propylene)	C_3H_6	42.1	1.748[1)]	0.1091[1)]
R-11		137.37		
R-12		120.92		
R-22		86.48		
R-114		170.93		
R-123		152.93		

R-134a		102.03		
Sasol				0.032
Sulfur	S	32.06		0.135
Sulfur Dioxide	SO_2	64.06	2.279[1)] 2.926[2)]	0.1703[1)] 0.1828[2)]
Sulfur Trioxide	SO_3	80.062		
Sulfuric Oxide	SO	48.063		
Toluene	C_7H_8	92.141	4.111	0.2435
Water Vapor	H_2O	18.016	0.804	0.048
Water gas (bituminous)				0.054

[1)] NTP - Normal Temperature and Pressure - is defined as air at 20°C (293.15 K, 68°F) and 1 atm (101.325 kN/m^2, 101.325 kPa, 14.7 psia, 0 psig, 30 in Hg, 760 torr)

[2)] STP - Standard Temperature and Pressure - is defined as air at 0°C (273.15 K, 32°F) and 1 atm (101.325 kN/m^2, 101.325 kPa, 14.7 psia, 0 psig, 30 in Hg, 760 torr)

- 1 lb/ft^3 = 16.018 kg/m^3
- 1 kg/m^3 = 0.0624 lb/ft^3