300GasTable

Rec #	Gas	Symbol	GCF	Density (g/L) 25° C / 1 atm	Density (g/L) 0° C / 1 atm
1	**Acetic Acid**	C2H4F2	**0.4155**	2.7	2.947
2	**Acetic Anhydride**	C4H6O3	**0.258**	4.173	4.555
3	**Acetone**	C3H6O	**0.3556**	2.374	2.591
4	**Acetonitryl**	C2H3N	**0.5178**	1.678	1.832
5	**Acetylene**	C2H2	**0.6255**	1.064	1.162
6	**Air**	Air	**1.0015**	1.185	1.293
7	**Allene**	C3H4	**0.4514**	1.638	1.787
8	**Ammonia**	NH3	**0.7807**	0.696	0.76
9	**Argon**	Ar	**1.4047**	1.633	1.782
10	**Arsine**	AsH3	**0.7592**	3.186	3.478
11	**Benzene**	C6H6	**0.3057**	3.193	3.485
12	**Boron Trichloride**	BCl3	**0.4421**	4.789	5.228
13	**Boron Triflouride**	BF3	**0.5431**	2.772	3.025
14	**Bromine**	Br2	**0.8007**	6.532	7.13
15	**Bromochlorodifluoromethane**	CBrClF2	**0.3684**	6.759	7.378
16	**Bromodifluoromethane**	CHBrF2	**0.4644**	5.351	5.841
17	**Bromotrifluormethane**	CBrF3	**0.3943**	6.087	6.644
18	**Butane**	C4H10	**0.2622**	2.376	2.593
19	**Butanol**	C4H10O	**0.2406**	3.03	3.307
20	**Butene**	C4H8	**0.3056**	2.293	2.503
21	**Carbon Dioxide**	CO2	**0.7526**	1.799	1.964
22	**Carbon Disulfide**	CS2	**0.616**	3.112	3.397
23	**Carbon Monoxide**	CO	**1.0012**	1.145	1.25
24	**Carbon Tetrachloride**	CCl4	**0.3333**	6.287	6.863
25	**Carbonyl Sulfide**	COS	**0.668**	2.456	2.68
26	**Chlorine**	Cl2	**0.8451**	2.898	3.163
27	**Chlorine Trifluoride**	ClF3	**0.4496**	3.779	4.125
28	**Chlorobenzene**	C6H5Cl	**0.2614**	4.601	5.022
29	**Chlorodifluoroethane**	C2H3ClF2	**0.3216**	4.108	4.484
30	**Chloroform**	CHCl3	**0.4192**	4.879	5.326
31	**Chloropentafluoroethane**	C2ClF5	**0.2437**	6.314	6.892
32	**Chloropropane**	C3H7Cl	**0.308**	3.21	3.504
33	**Cisbutene**	C4H8	**0.3004**	2.293	2.503
34	**Cyanogen**	C2N2	**0.4924**	2.127	2.322
35	**Cyanogen Chloride**	ClCN	**0.6486**	2.513	2.743
36	**Cyclobutane**	C4H8	**0.3562**	2.293	2.503
37	**Cyclopropane**	C3H6	**0.4562**	1.72	1.877
38	**Deuterium**	H22	**1.0003**	0.165	0.18
39	**Diborane**	B2H6	**0.5063**	1.131	1.235
40	**Dibromodifluoromethane**	CBr2F2	**0.359**	8.576	9.361
41	**Dichlorofluoromethane**	CHCl2F	**0.4481**	4.207	4.592
42	**Dichloromethane**	CH2Cl2	**0.5322**	3.472	3.789
43	**Dichloropropane**	C3H6Cl2	**0.2698**	4.618	5.041

44	**Dichlorosilane**	H2SiCl2	**0.4716**	4.129	4.506
45	**Diethyl Amine**	C4H11N	**0.2256**	2.989	3.263
46	**Diethyl Ether**	C4H10O	**0.2235**	3.03	3.307
47	**Diethyl Sulfide**	C4H10S	**0.2255**	3.686	4.024
48	**Difluoroethylene**	C2H2F2	**0.4492**	2.617	2.857
49	**Dimethylamine**	C2H7N	**0.3705**	1.843	2.011
50	**Dimethyl Ether**	C2H6O	**0.4088**	1.883	2.055
51	**Dimethyl Sulfide**	C2H6S	**0.3623**	2.54	2.772
52	**Divinyl**	C4H6	**0.3248**	2.211	2.413
53	**Ethane**	C2H6	**0.4998**	1.229	1.342
54	**Ethane, 1-chloro-1,1,2,2-tetrafluoro-**	C2HClF4	**0.2684**	5.578	6.089
55	**Ethane, 1-chloro-1,2,2,2-tetrafluoro-**	C2HClF4	**0.2719**	5.578	6.089
56	**Ethanol**	C2H6O	**0.4046**	1.883	2.055
57	**Ethylacetylene**	C4H6	**0.3256**	2.211	2.413
58	**Ethyl Amine**	C2H7N	**0.3694**	1.843	2.011
59	**Ethylbenzene**	C8H10	**0.2001**	4.339	4.737
60	**Ethyl Bromide**	C2H5Br	**0.4124**	4.454	4.862
61	**Ethyl Chloride**	C2H5Cl	**0.4212**	2.637	2.878
62	**Ethyl Fluoride**	C2H5F	**0.443**	1.964	2.144
63	**Ethylene**	C2H4	**0.6062**	1.147	1.252
64	**Ethylene Dibromide**	C2H4Br2	**0.3173**	7.679	8.382
65	**Ethylene Dichloride**	C2H4Cl2	**0.3475**	4.045	4.415
66	**Ethylene Oxide**	C2H4O	**0.5308**	1.801	1.965
67	**Ethyleneimine**	C2H4N	**0.479**	1.719	1.877
68	**Ethylidene Dichloride**	C2H4Cl2	**0.3506**	4.045	4.415
69	**Ethyl Mercaptan**	C2H6S	**0.3654**	2.54	2.772
70	**Fluorine**	F2	**0.9115**	1.553	1.695
71	**Formaldehyde**	CH2O	**0.7912**	1.227	1.34
72	**Freon 11**	CCl3F	**0.3535**	5.615	6.129
73	**Freon 12**	CCl2F2	**0.3712**	4.942	5.395
74	**Freon 13**	CClF3	**0.3792**	4.27	4.661
75	**Freon 14**	CF4	**0.4422**	3.597	3.926
76	**Freon 22**	CHClF2	**0.4857**	3.534	3.858
77	**Freon 23**	CHF3	**0.5282**	2.862	3.124
78	**Freon 114**	C2Cl2F4	**0.2327**	6.986	7.626
79	**Furan**	C4H4O	**0.3889**	2.783	3.037
80	**Helium**	He	**1.4005**	0.164	0.179
81	**Heptafluoropropane**	C3HF7	**0.1987**	6.95	7.586
82	**Hexamethyldisilazane**	C6H19NSi2	**0.1224**	6.597	7.201
83	**Hexamethyldisiloxane**	C6H18OSi2	**0.1224**	6.637	7.245
84	**Hexane**	C6H14	**0.1828**	3.522	3.845
85	**Hexafluorobenzene**	C6F6	**0.1733**	7.605	8.301
86	**Hexene**	C6H12	**0.1918**	3.44	3.755
87	**Hydrazine**	N2H4	**0.5506**	1.31	1.43
88	**Hydrogen**	H2	**1.0038**	0.082	0.09
89	**Hydrogen Bromide**	HBr	**1.0028**	3.307	3.61
90	**Hydrogen Chloride**	HCl	**1.0034**	1.49	1.627

91	**Hydrogen Cyanide**	CHN	**0.7772**	1.105	1.206
92	**Hydrogen Fluoride**	HF	**1.0039**	0.818	0.893
93	**Hydrogen Iodide**	HI	**0.9996**	5.228	5.707
94	**Hydrogen Selenide**	H2Se	**0.8412**	3.309	3.612
95	**Hydrogen Sulfide**	H2S	**0.842**	1.393	1.521
96	**Isobutane**	C4H10	**0.2725**	2.376	2.593
97	**Isobutanol**	C4H10O	**0.2391**	3.03	3.307
98	**Isobutene**	C4H8	**0.2984**	2.293	2.503
99	**Isopentane**	C5H12	**0.2175**	2.949	3.219
100	**Isopropyl Alcohol**	C3H8O	**0.2931**	2.456	2.681
101	**Isoxazole**	C3H3NO	**0.4333**	2.823	3.081
102	**Ketene**	C2H2O	**0.5732**	1.718	1.875
103	**Krypton**	Kr	**1.4042**	3.425	3.739
104	**Methane**	CH4	**0.7787**	0.656	0.716
105	**Methanol**	CH4O	**0.6167**	1.31	1.43
106	**Methyl Acetate**	C3H6O2	**0.3083**	3.028	3.305
107	**Methyl Acetylene**	C3H4	**0.443**	1.638	1.787
108	**Methylamine**	CH5N	**0.536**	1.269	1.386
109	**Methyl Bromide**	CH3Br	**0.6358**	3.881	4.236
110	**Methyl Chloride**	CH3Cl	**0.6639**	2.064	2.253
111	**Methylcyclohexane**	C7H14	**0.1853**	4.013	4.381
112	**Methyl Ethyl Amine**	C3H9N	**0.2692**	2.416	2.637
113	**Methyl Ethyl Ether**	C3H8O	**0.2844**	2.456	2.681
114	**Methyl Ethyl Sulfide**	C3H8S	**0.2743**	3.113	3.398
115	**Methyl Fluoride**	CH3F	**0.7247**	1.391	1.518
116	**Methyl Formate**	C2H4O2	**0.3975**	2.455	2.679
117	**Methyl Iodide**	CH3I	**0.6514**	5.802	6.333
118	**Methyl Mercaptan**	CH4S	**0.5409**	1.966	2.146
119	**Methylpentene**	C6H12	**0.2037**	3.44	3.755
120	**Methyl Vinyl Ether**	C3H6O	**0.3435**	2.374	2.591
121	**Neon**	Ne	**1.4043**	0.825	0.9
122	**Nitric Oxide**	NO	**0.9795**	1.226	1.339
123	**Nitrogen**	N2	**1**	1.145	1.25
124	**Nitrogen Dioxide**	NO2	**0.7604**	1.88	2.053
125	**Nitrogen Tetroxide**	N2O4	**0.3395**	3.761	4.105
126	**Nitrogen Trifluoride**	NF3	**0.5406**	2.902	3.168
127	**Nitromethane**	CH3NO2	**0.4653**	2.495	2.723
128	**Nitrosyl Chloride**	NOCl	**0.6357**	2.676	2.92
129	**Nitrous Oxide**	N2O	**0.7121**	1.799	1.964
130	**n-Pentane**	C5H12	**0.2121**	2.949	3.219
131	**Octane**	C8H18	**0.1386**	4.669	5.096
132	**Oxygen**	O2	**0.9779**	1.308	1.428
133	**Oxygen Difluoride**	F2O	**0.6454**	2.207	2.409
134	**Ozone**	O3	**0.7022**	1.962	2.141
135	**Pentaborane**	B5H9	**0.1499**	2.58	2.816
136	**Pentane**	C5H12	**0.2175**	2.949	3.219
137	**Perchloryl Fluoride**	ClFO3	**0.4155**	4.188	4.571

138	**Perfluorocyclobutane**	C4F8	**0.1711**	8.176	8.924
139	**Perfluoroethane**	C2F6	**0.253**	5.641	6.158
140	**Perfluoropropane**	C3F8	**0.1818**	7.685	8.389
141	**Phenol**	C6H6O	**0.2489**	3.847	4.199
142	**Phosgene**	COCl2	**0.4812**	4.043	4.413
143	**Phosphine**	PH3	**0.7859**	1.39	1.517
144	**Phosphorus Trifluoride**	PF3	**0.4973**	3.596	3.925
145	**Propane**	C3H8	**0.3499**	1.802	1.967
146	**Propyl Alcohol**	C3H8O	**0.3061**	2.456	2.681
147	**Propyl Amine**	C3H9N	**0.286**	2.416	2.637
148	**Propylene**	C3H6	**0.4048**	1.72	1.877
149	**Pyridine**	C5H5N	**0.3222**	3.233	3.529
150	**R32**	CH2F2	**0.6197**	2.126	2.321
151	**R123**	C2HCl2F3	**0.2583**	6.251	6.823
152	**R123A**	C2HCl2F3	**0.2699**	6.251	6.823
153	**R125**	C2HF5	**0.2826**	4.906	5.355
154	**R134**	C2H2F4	**0.2996**	4.17	4.552
155	**R134A**	C2H2F4	**0.311**	4.17	4.552
156	**R143**	C2H3F3	**0.3451**	3.435	3.75
157	**R143A**	C2H3F3	**0.3394**	3.435	3.75
158	**R152A**	C2H4F2	**0.3877**	2.7	2.947
159	**R218**	C3F8	**0.1818**	7.685	8.389
160	**R1416**	C2H3Cl2F	**0.3047**	4.78	5.218
161	**Radon**	Rn	**1.4043**	9.074	9.905
162	**Sec-butanol**	C4H10O	**0.2327**	3.03	3.307
163	**Silane**	SiH4	**0.6809**	1.313	1.433
164	**Silicone Tetrafluoride**	SiF4	**0.3896**	4.254	4.644
165	**Sulfur Dioxide**	SO2	**0.6878**	2.619	2.858
166	**Sulfur Hexafluoride**	SF6	**0.2701**	5.97	6.516
167	**Sulfur Tetrafluoride**	SF4	**0.3752**	4.417	4.821
168	**Sulfur Trifluoride**	SF3	**0.4368**	3.64	3.974
169	**Sulfur Trioxide**	SO3	**0.5397**	3.273	3.572
170	**Tetrachloroethylene**	C2Cl4	**0.2926**	6.778	7.399
171	**Tetrafluoroethylene**	C2F4	**0.3395**	4.088	4.462
172	**Tetrahydrofuran**	C4H8O	**0.3271**	2.947	3.217
173	**Tert-butanol**	C4H10O	**0.2298**	3.03	3.307
174	**Thiophene**	C4H4S	**0.3538**	2.783	3.037
175	**Toluene**	C7H8	**0.2448**	3.766	4.111
176	**Transbutene**	C4H8	**0.2053**	2.293	2.503
177	**Trichloroethane**	C2H3Cl3	**0.3133**	5.453	5.952
178	**Trichloroethylene**	C2HCl4	**0.3423**	6.82	7.444
179	**Trichlorotrifluoroethane**	C2Cl3F3	**0.2253**	7.659	8.36
180	**Triethylamine**	C6H15N	**0.1619**	4.136	4.515
181	**Trimethyl Amine**	C3H9N	**0.2822**	2.416	2.637
182	**Tungsten Hexafluoride**	WF6	**0.2453**	12.174	13.288
183	**Uranium Hexafluoride**	UF6	**0.1859**	14.389	15.706
184	**Vinyl Bromide**	C2H3Br	**0.4768**	4.372	4.772

185	**Vinyl Chloride**	C2H3Cl	**0.4956**	2.555	2.788
186	**Vinyl Flouride**	C2H3F	**0.5716**	1.882	2.054
187	**Water Vapor**	H2O	**0.7992**	0.742	0.81
188	**Xenon**	Xe	**1.4042**	5.366	5.858
189	**Xylene, m-**	C8H10	**0.2036**	4.339	4.737
190	**Xylene, o-**	C8H10	**0.1953**	4.339	4.737
191	**Xylene, p-**	C8H10	**0.2028**	4.339	4.737

Synonyms	Gamma (Cp/Cv)25	R J/gm*K
Ethanoic Acid	1.2	125.88
Aceticanhydride	1.2	81.44
2-propanone	1.2	143.16
Methyl Cyanide	1.2	202.54
Ethyne	1.23	319.33
NA	1.4	287
Propadiene	1.2	207.53
NA	1.32	488.21
NA	1.66	208.13
NA	1.2	106.67
NA	1.2	106.44
NA	1.2	70.96
NA	1.2	122.62
NA	1.4	52.03
NA	1.2	50.28
NA	1.2	63.51
NA	1.2	55.84
NA	1.09	143.05
1-Butanol, Butyl Alcohol	1.2	112.17
1-Butene, 1-Butylene	1.2	148.19
NA	1.22	188.93
NA	1.2	109.2
NA	1.4	296.84
Tetrachloromethane	1.2	54.05
Carbon Oxysulfide	1.2	138.4
NA	1.4	117.26
NA	1.2	89.94
NA	1.2	73.87
Ethane, 2-chloro-1,1-difluoro-	1.2	82.74
Trichloromethane	1.2	69.65
NA	1.2	53.83
Propylchloride	1.2	105.86
Cis-2-butene	1.2	148.19
NA	1.2	159.79
NA	1.2	135.26
Tetramethylene	1.2	148.19
Trimethylene	1.2	197.59
D2	1.4	2062.13
NA	1.2	300.49
NA	1.2	39.63
R21	1.2	80.78
Methylene Chloride	1.2	97.9
1,2-dichloropropane,	1.2	73.59

NA	1.2	82.32
NA	1.2	113.68
1,1-oxybisethane	1.2	112.17
3-thiapentane, UN-2375	1.2	92.19
Vinylidenefluoride, G-1132A, Difluoroethene	1.2	129.85
N-methylmethanamine	1.2	184.42
Methylether; Methane, Oxybis-	1.2	180.48
2-thiopropane, Thiobismethane	1.2	133.81
1,3-butadiene	1.2	153.71
NA	1.19	276.51
Chlorotetrafluoroethane, F124, R124, Monochlorotetrafluoroethane	1.2	60.92
Chlorotetrafluoroethane	1.2	60.92
Ethyl Alcohol	1.2	180.48
1-butyne	1.2	153.71
Ethanamine	1.2	184.42
1-butyne	1.2	78.32
NA	1.2	75.6
Chloroethane	1.2	128.88
Fluoroethane, R-161	1.2	173
Ethene	1.21	296.38
1,2-dibromoethane	1.2	44.26
1,2-dichloroethane	1.2	84.02
Acetaldehide	1.2	188.74
Aziridine	1.2	197.71
1,1-dichloroethane	1.2	84.02
Ethanethiol	1.2	133.81
NA	1.4	218.82
NA	1.2	276.91
Trichloro,fluoromethane	1.2	60.53
Dichloro,difluoromethane	1.2	68.76
Chloro, trifluoromethane	1.2	79.6
Carb. Tetrafluoride, Meth.Tetrafluoride	1.2	94.48
Chloro, difluoromethane	1.2	96.16
Trifluoromethane, Fluoroform	1.2	118.76
1,2-dichloro, 1,1,,2,2-tetrafluoroethane	1.2	48.65
Oxacylopentadiene	1.2	122.139
NA	1.66	2077.28
Freon 227, R-227ea	1.2	48.9
HMDS	1.2	51.52
NA	1.2	51.2
NA	1.2	96.48
Perfluorobenzene	1.2	44.69
1-Hexene, 4-Methyl, 1-Pentene	1.2	98.79
NA	1.2	259.46
NA	1.38	4124.51
NA	1.38	102.76
NA	1.4	228.04

Hydrocyanic Acid	1.2	307.66
NA	1.4	415.59
NA	1.4	65
NA	1.2	102.68
NA	1.2	243.96
2-Methylpropane	1.2	143.05
2-methyl-1-propanol, Isobutyl Alcohol	1.2	112.17
Isobutylene, Methylpropene	1.2	148.19
2-methylbutane	1.2	115.24
2- propanol	1.2	138.356
1-Oxa-2-azacyclopentadiene	1.2	120.39
NA	1.2	197.79
NA	1.6	99.22
NA	1.31	518.28
Methyl Alcohol	1.2	259.49
Methyl Ethanoate	1.2	112.24
Propyne	1.2	207.53
Methanamine	1.2	267.72
NA	1.2	87.58
Chloromethane	1.2	164.77
NA	1.2	84.681
2-propanamine	1.2	140.661
Methoxyethane	1.2	138.356
2-thiabutane, Methylthioethane	1.2	109.169
Fluoromethane	1.2	244.31
Acetic Acid	1.2	188.74
NA	1.2	58.58
Methanethiol	1.2	172.83
NA	1.2	98.79
NA	1.2	143.16
NA	1.6	412.02
Niutrogen Monoxide	1.4	277.09
NA	1.4	296.8
NA	1.2	180.73
NA	1.2	90.36
NA	1.2	117.1
NA	1.2	136.21
NA	1.2	127.02
NA	1.2	188.91
Dimethylpropane	1.2	115.24
NA	1.2	72.788
NA	1.48	259.84
NA	1.2	153.983
NA	1.2	173.23
NA	1.2	131.71
NA	1.2	115.24
NA	1.2	81.16

Octafluorocyclobutane	1.2	41.57
R116, Hexafluoroethane	1.2	60.24
NA	1.2	44.22
Hydroxybenzene	1.2	88.348
Carbonyl Chloride	1.2	84.06
NA	1.2	244.56
NA	1.2	94.52
NA	1.13	188.56
1- propanol	1.2	138.356
1-propanamine	1.2	140.661
Propene	1.2	197.59
Azine, Azabenzene	1.2	105.114
Difluoromethane, Methylene Fluoride	1.2	153.91
1,1-Dichloro-2,2,2-trifluoroethane	1.2	54.37
1,2-Dichloro-1,2,2-trifluoroethane	1.2	54.37
Pentafluoroethane	1.2	66.5
1,1,2,2-tetrafluoroethane	1.2	78.42
1,1,1,2-tetrafluoroethane	1.2	78.42
1,1,2-trifluoroethane	1.2	95.52
1,1,1-trifluoroethane, Methylfluoroform	1.2	95.52
1,1-Difluoroethane	1.2	122.18
Octafluoropropane	1.2	44.22
1,1-Dichloro-1-fluoroethane,	1.2	71.1
NA	1.2	37.45
2-butanol, Sec-butyl Alcohol	1.2	112.17
NA	1.2	258.88
Tetrafluorosilane	1.2	79.89
NA	1.2	129.78
NA	1.2	56.93
NA	1.2	76.94
NA	1.2	93.36
NA	1.2	103.85
NA	1.2	50.14
Tetrafluoroethene	1.2	83.13
NA	1.2	115.31
2-methyl-2-propanol, Tertiarey Butyl Alcohol	1.2	112.17
Thiofuran	1.2	122.14
Methylbutene	1.2	90.24
2-butene	1.2	148.19
NA	1.2	62.33
NA	1.2	63.28
R113, 1,1,2-trichloro-1,2,2-trifluoroethane	1.2	44.374
UN 1296, n,n-diethylethanamine	1.2	82.167
n,n-dimethylmethanamine	1.2	140.661
NA	1.2	27.92
Uranium Fluoride	1.2	23.62
NA	1.2	77.74

Chloroethylene	1.2	133.04
NA	1.2	180.58
NA	1.33	461.53
NA	1.6	63.33
NA	1.2	78.32
NA	1.2	78.32
NA	1.2	78.32