

300GasTable

Rec #	Gas	Symbol	GCF	Density (g/L)	
				25° C / 1 atm	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	H ₂ SiCl ₂	0.4716	4.129	4.506
45	Diethyl Amine	C ₄ H ₁₁ N	0.2256	2.989	3.263
46	Diethyl Ether	C ₄ H ₁₀ O	0.2235	3.03	3.307
47	Diethyl Sulfide	C ₄ H ₁₀ S	0.2255	3.686	4.024
48	Difluoroethylene	C ₂ H ₂ F ₂	0.4492	2.617	2.857
49	Dimethylamine	C ₂ H ₇ N	0.3705	1.843	2.011
50	Dimethyl Ether	C ₂ H ₆ O	0.4088	1.883	2.055
51	Dimethyl Sulfide	C ₂ H ₆ S	0.3623	2.54	2.772
52	Divinyl	C ₄ H ₆	0.3248	2.211	2.413
53	Ethane	C ₂ H ₆	0.4998	1.229	1.342
54	Ethane, 1-chloro-1,1,2,2-tetrafluoro-	C ₂ HClF ₄	0.2684	5.578	6.089
55	Ethane, 1-chloro-1,2,2,2-tetrafluoro-	C ₂ HClF ₄	0.2719	5.578	6.089
56	Ethanol	C ₂ H ₆ O	0.4046	1.883	2.055
57	Ethylacetylene	C ₄ H ₆	0.3256	2.211	2.413
58	Ethyl Amine	C ₂ H ₇ N	0.3694	1.843	2.011
59	Ethylbenzene	C ₈ H ₁₀	0.2001	4.339	4.737
60	Ethyl Bromide	C ₂ H ₅ Br	0.4124	4.454	4.862
61	Ethyl Chloride	C ₂ H ₅ Cl	0.4212	2.637	2.878
62	Ethyl Fluoride	C ₂ H ₅ F	0.443	1.964	2.144
63	Ethylene	C ₂ H ₄	0.6062	1.147	1.252
64	Ethylene Dibromide	C ₂ H ₄ Br ₂	0.3173	7.679	8.382
65	Ethylene Dichloride	C ₂ H ₄ Cl ₂	0.3475	4.045	4.415
66	Ethylene Oxide	C ₂ H ₄ O	0.5308	1.801	1.965
67	Ethyleneimine	C ₂ H ₄ N	0.479	1.719	1.877
68	Ethylidene Dichloride	C ₂ H ₄ Cl ₂	0.3506	4.045	4.415
69	Ethyl Mercaptan	C ₂ H ₆ S	0.3654	2.54	2.772
70	Fluorine	F ₂	0.9115	1.553	1.695
71	Formaldehyde	CH ₂ O	0.7912	1.227	1.34
72	Freon 11	CCl ₃ F	0.3535	5.615	6.129
73	Freon 12	CCl ₂ F ₂	0.3712	4.942	5.395
74	Freon 13	CClF ₃	0.3792	4.27	4.661
75	Freon 14	CF ₄	0.4422	3.597	3.926
76	Freon 22	CHClF ₂	0.4857	3.534	3.858
77	Freon 23	CHF ₃	0.5282	2.862	3.124
78	Freon 114	C ₂ Cl ₂ F ₄	0.2327	6.986	7.626
79	Furan	C ₄ H ₄ O	0.3889	2.783	3.037
80	Helium	He	1.4005	0.164	0.179
81	Heptafluoropropane	C ₃ HF ₇	0.1987	6.95	7.586
82	Hexamethyldisilazane	C ₆ H ₁₉ NSi ₂	0.1224	6.597	7.201
83	Hexamethyldisiloxane	C ₆ H ₁₈ OSi ₂	0.1224	6.637	7.245
84	Hexane	C ₆ H ₁₄	0.1828	3.522	3.845
85	Hexafluorobenzene	C ₆ F ₆	0.1733	7.605	8.301
86	Hexene	C ₆ H ₁₂	0.1918	3.44	3.755
87	Hydrazine	N ₂ H ₄	0.5506	1.31	1.43
88	Hydrogen	H ₂	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	H ₂ Se	0.8412	3.309	3.612
95	Hydrogen Sulfide	H ₂ S	0.842	1.393	1.521
96	Isobutane	C ₄ H ₁₀	0.2725	2.376	2.593
97	Isobutanol	C ₄ H ₁₀ O	0.2391	3.03	3.307
98	Isobutene	C ₄ H ₈	0.2984	2.293	2.503
99	Isopentane	C ₅ H ₁₂	0.2175	2.949	3.219
100	Isopropyl Alcohol	C ₃ H ₈ O	0.2931	2.456	2.681
101	Isoxazole	C ₃ H ₃ NO	0.4333	2.823	3.081
102	Ketene	C ₂ H ₂ O	0.5732	1.718	1.875
103	Krypton	Kr	1.4042	3.425	3.739
104	Methane	CH ₄	0.7787	0.656	0.716
105	Methanol	CH ₄ O	0.6167	1.31	1.43
106	Methyl Acetate	C ₃ H ₆ O ₂	0.3083	3.028	3.305
107	Methyl Acetylene	C ₃ H ₄	0.443	1.638	1.787
108	Methylamine	CH ₅ N	0.536	1.269	1.386
109	Methyl Bromide	CH ₃ Br	0.6358	3.881	4.236
110	Methyl Chloride	CH ₃ Cl	0.6639	2.064	2.253
111	Methylcyclohexane	C ₇ H ₁₄	0.1853	4.013	4.381
112	Methyl Ethyl Amine	C ₃ H ₉ N	0.2692	2.416	2.637
113	Methyl Ethyl Ether	C ₃ H ₈ O	0.2844	2.456	2.681
114	Methyl Ethyl Sulfide	C ₃ H ₈ S	0.2743	3.113	3.398
115	Methyl Fluoride	CH ₃ F	0.7247	1.391	1.518
116	Methyl Formate	C ₂ H ₄ O ₂	0.3975	2.455	2.679
117	Methyl Iodide	CH ₃ I	0.6514	5.802	6.333
118	Methyl Mercaptan	CH ₄ S	0.5409	1.966	2.146
119	Methylpentene	C ₆ H ₁₂	0.2037	3.44	3.755
120	Methyl Vinyl Ether	C ₃ H ₆ O	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	N ₂	1	1.145	1.25
124	Nitrogen Dioxide	NO ₂	0.7604	1.88	2.053
125	Nitrogen Tetroxide	N ₂ O ₄	0.3395	3.761	4.105
126	Nitrogen Trifluoride	NF ₃	0.5406	2.902	3.168
127	Nitromethane	CH ₃ NO ₂	0.4653	2.495	2.723
128	Nitrosyl Chloride	NOCl	0.6357	2.676	2.92
129	Nitrous Oxide	N ₂ O	0.7121	1.799	1.964
130	n-Pentane	C ₅ H ₁₂	0.2121	2.949	3.219
131	Octane	C ₈ H ₁₈	0.1386	4.669	5.096
132	Oxygen	O ₂	0.9779	1.308	1.428
133	Oxygen Difluoride	F ₂ O	0.6454	2.207	2.409
134	Ozone	O ₃	0.7022	1.962	2.141
135	Pentaborane	B ₅ H ₉	0.1499	2.58	2.816
136	Pentane	C ₅ H ₁₂	0.2175	2.949	3.219
137	Perchloryl Fluoride	ClFO ₃	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 Fluoride	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
Acetic anhydride	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
Vinylidene fluoride, G-1132A, Difluoroethene	1.2	129.85
N-methylmethanamine	1.2	184.42
Methylether; Methane, Oxybis-	1.2	180.48
2-thiopropene, 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
Acetaldehyde	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