

R 1234yf

2,3,3,3-Tetrafluoropropene



Saturated Pressure Table

temperature [°C]	pressure [bar]	density [kg/m ³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
		liquid	vapour	liquid	vapour	liquid	vapour
-40,0	0,624	1291,9	3,795	151,07	336,58	0,8074	1,6031
-39,0	0,655	1289,2	3,970	152,23	337,25	0,8124	1,6025
-38,0	0,687	1286,5	4,152	153,39	337,93	0,8173	1,6020
-37,0	0,720	1283,8	4,340	154,56	338,60	0,8222	1,6016
-36,0	0,755	1281,0	4,535	155,73	339,27	0,8272	1,6011
-35,0	0,790	1278,3	4,737	156,90	339,95	0,8321	1,6007
-34,0	0,828	1275,6	4,946	158,08	340,62	0,8370	1,6003
-33,0	0,866	1272,8	5,162	159,26	341,30	0,8419	1,5999
-32,0	0,906	1270,1	5,386	160,44	341,97	0,8468	1,5996
-31,0	0,948	1267,3	5,617	161,62	342,65	0,8517	1,5993
-30,0	0,991	1264,5	5,855	162,81	343,32	0,8566	1,5990
-29,0	1,035	1261,8	6,102	164,00	344,00	0,8615	1,5987
-28,0	1,081	1259,0	6,357	165,20	344,67	0,8663	1,5984
-27,0	1,129	1256,2	6,620	166,39	345,34	0,8712	1,5982
-26,0	1,178	1253,4	6,891	167,60	346,02	0,8760	1,5980
-25,0	1,229	1250,5	7,171	168,80	346,69	0,8809	1,5977
-24,0	1,281	1247,7	7,460	170,01	347,36	0,8857	1,5976
-23,0	1,336	1244,9	7,758	171,22	348,04	0,8906	1,5974
-22,0	1,392	1242,0	8,066	172,43	348,71	0,8954	1,5973
-21,0	1,449	1239,2	8,383	173,65	349,38	0,9002	1,5971
-20,0	1,509	1236,3	8,709	174,87	350,05	0,9050	1,5970
-19,0	1,571	1233,4	9,046	176,09	350,72	0,9098	1,5969
-18,0	1,634	1230,5	9,393	177,32	351,39	0,9146	1,5968
-17,0	1,700	1227,6	9,750	178,55	352,06	0,9194	1,5968
-16,0	1,768	1224,7	10,12	179,79	352,73	0,9242	1,5967
-15,0	1,837	1221,8	10,50	181,02	353,40	0,9290	1,5967
-14,0	1,909	1218,8	10,89	182,27	354,06	0,9338	1,5967
-13,0	1,983	1215,9	11,29	183,51	354,73	0,9385	1,5967
-12,0	2,059	1212,9	11,70	184,76	355,39	0,9433	1,5967
-11,0	2,137	1209,9	12,12	186,01	356,06	0,9480	1,5967
-10,0	2,218	1207,0	12,56	187,26	356,72	0,9528	1,5968
-9,0	2,301	1203,9	13,01	188,52	357,38	0,9575	1,5968
-8,0	2,386	1200,9	13,47	189,78	358,04	0,9623	1,5969
-7,0	2,474	1197,9	13,94	191,05	358,70	0,9670	1,5969
-6,0	2,564	1194,9	14,43	192,31	359,36	0,9717	1,5970
-5,0	2,656	1191,8	14,93	193,59	360,02	0,9765	1,5971
-4,0	2,751	1188,7	15,45	194,86	360,68	0,9812	1,5973
-3,0	2,849	1185,6	15,97	196,14	361,33	0,9859	1,5974
-2,0	2,950	1182,5	16,52	197,42	361,99	0,9906	1,5975
-1,0	3,053	1179,4	17,07	198,71	362,64	0,9953	1,5977
0,0	3,158	1176,3	17,65	200,00	363,29	1,0000	1,5978

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Saturated Pressure Table

temperature [°C]	pressure [bar]	density [kg/m ³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
		liquid	vapour	liquid	vapour	liquid	vapour
1,0	3,267	1173,1	18,23	201,29	363,94	1,0047	1,5980
2,0	3,378	1170,0	18,84	202,59	364,59	1,0094	1,5981
3,0	3,492	1166,8	19,46	203,89	365,23	1,0141	1,5983
4,0	3,609	1163,6	20,09	205,20	365,88	1,0187	1,5985
5,0	3,729	1160,4	20,74	206,50	366,52	1,0234	1,5987
6,0	3,852	1157,2	21,41	207,82	367,16	1,0281	1,5989
7,0	3,978	1153,9	22,10	209,13	367,80	1,0328	1,5991
8,0	4,108	1150,6	22,80	210,45	368,44	1,0374	1,5993
9,0	4,240	1147,3	23,53	211,78	369,07	1,0421	1,5996
10,0	4,375	1144,0	24,27	213,10	369,70	1,0467	1,5998
11,0	4,514	1140,7	25,03	214,43	370,33	1,0514	1,6000
12,0	4,656	1137,4	25,81	215,77	370,96	1,0560	1,6003
13,0	4,802	1134,0	26,61	217,11	371,59	1,0607	1,6005
14,0	4,950	1130,6	27,43	218,45	372,21	1,0653	1,6008
15,0	5,103	1127,2	28,27	219,80	372,83	1,0699	1,6010
16,0	5,258	1123,8	29,13	221,15	373,45	1,0746	1,6013
17,0	5,418	1120,3	30,01	222,51	374,06	1,0792	1,6016
18,0	5,580	1116,9	30,92	223,87	374,67	1,0838	1,6018
19,0	5,747	1113,4	31,85	225,23	375,28	1,0885	1,6021
20,0	5,917	1109,9	32,80	226,60	375,89	1,0931	1,6024
21,0	6,091	1106,3	33,77	227,97	376,49	1,0977	1,6026
22,0	6,269	1102,8	34,77	229,34	377,09	1,1023	1,6029
23,0	6,451	1099,2	35,80	230,73	377,69	1,1069	1,6032
24,0	6,636	1095,5	36,85	232,11	378,28	1,1115	1,6034
25,0	6,826	1091,9	37,93	233,50	378,87	1,1162	1,6037
26,0	7,019	1088,2	39,03	234,89	379,45	1,1208	1,6040
27,0	7,217	1084,5	40,16	236,29	380,03	1,1254	1,6043
28,0	7,419	1080,8	41,32	237,69	380,61	1,1300	1,6045
29,0	7,625	1077,1	42,51	239,10	381,18	1,1346	1,6048
30,0	7,835	1073,3	43,73	240,51	381,75	1,1392	1,6051
31,0	8,050	1069,5	44,98	241,93	382,31	1,1438	1,6053
32,0	8,269	1065,7	46,26	243,35	382,87	1,1484	1,6056
33,0	8,492	1061,8	47,57	244,78	383,43	1,1530	1,6059
34,0	8,720	1057,9	48,92	246,21	383,98	1,1576	1,6061
35,0	8,952	1054,0	50,30	247,64	384,52	1,1622	1,6064
36,0	9,189	1050,0	51,72	249,09	385,06	1,1668	1,6066
37,0	9,431	1046,0	53,17	250,53	385,60	1,1714	1,6068
38,0	9,677	1042,0	54,66	251,98	386,13	1,1759	1,6071
39,0	9,928	1037,9	56,19	253,44	386,65	1,1805	1,6073
40,0	10,18	1033,8	57,75	254,90	387,17	1,1851	1,6075

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		liquid	vapour	liquid	vapour	liquid	vapour
41,0	10,45	1029,6	59,36	256,37	387,68	1,1897	1,6077
42,0	10,71	1025,5	61,01	257,84	388,19	1,1943	1,6079
43,0	10,98	1021,2	62,70	259,32	388,69	1,1989	1,6081
44,0	11,26	1017,0	64,44	260,81	389,18	1,2035	1,6083
45,0	11,54	1012,6	66,22	262,30	389,66	1,2082	1,6085
46,0	11,83	1008,3	68,05	263,80	390,14	1,2128	1,6086
47,0	12,12	1003,9	69,93	265,30	390,61	1,2174	1,6088
48,0	12,41	999,44	71,86	266,81	391,08	1,2220	1,6089
49,0	12,72	994,94	73,85	268,33	391,53	1,2266	1,6091
50,0	13,02	990,38	75,88	269,85	391,98	1,2312	1,6092
51,0	13,34	985,77	77,98	271,38	392,42	1,2359	1,6093
52,0	13,66	981,10	80,13	272,92	392,85	1,2405	1,6094
53,0	13,98	976,38	82,34	274,47	393,27	1,2452	1,6094
54,0	14,31	971,59	84,62	276,02	393,68	1,2498	1,6095
55,0	14,65	966,73	86,96	277,58	394,08	1,2545	1,6095
56,0	14,99	961,80	89,37	279,15	394,48	1,2592	1,6095
57,0	15,34	956,81	91,85	280,73	394,86	1,2638	1,6095
58,0	15,69	951,73	94,41	282,32	395,23	1,2685	1,6095
59,0	16,05	946,58	97,04	283,92	395,58	1,2732	1,6094
60,0	16,42	941,34	99,75	285,53	395,93	1,2779	1,6093
61,0	16,79	936,02	102,6	287,14	396,26	1,2827	1,6092
62,0	17,17	930,60	105,4	288,77	396,58	1,2874	1,6091
63,0	17,56	925,08	108,4	290,41	396,89	1,2922	1,6089
64,0	17,95	919,46	111,5	292,06	397,18	1,2969	1,6087
65,0	18,35	913,73	114,7	293,72	397,46	1,3017	1,6085
66,0	18,75	907,89	118,0	295,39	397,71	1,3065	1,6082
67,0	19,17	901,93	121,4	297,08	397,96	1,3114	1,6079
68,0	19,59	895,83	124,9	298,78	398,18	1,3162	1,6076
69,0	20,01	889,60	128,5	300,49	398,38	1,3211	1,6072
70,0	20,45	883,23	132,3	302,22	398,57	1,3260	1,6068
71,0	20,89	876,70	136,3	303,96	398,73	1,3309	1,6063
72,0	21,33	870,01	140,4	305,72	398,87	1,3359	1,6058
73,0	21,79	863,15	144,6	307,50	398,98	1,3409	1,6052
74,0	22,25	856,10	149,0	309,30	399,07	1,3459	1,6045
75,0	22,72	848,85	153,7	311,11	399,13	1,3510	1,6038
76,0	23,20	841,38	158,5	312,95	399,16	1,3561	1,6030
77,0	23,69	833,68	163,6	314,81	399,15	1,3612	1,6021
78,0	24,18	825,73	168,9	316,69	399,11	1,3664	1,6011
79,0	24,68	817,51	174,5	318,60	399,03	1,3717	1,6001
80,0	25,19	808,98	180,3	320,54	398,90	1,3770	1,5989

Saturated Pressure Table

temperature [°C]	pressure [bar]	density [kg/m³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
		liquid	vapour	liquid	vapour	liquid	vapour
81,0	25,71	800,13	186,6	322,52	398,73	1,3824	1,5976
82,0	26,24	790,90	193,1	324,52	398,50	1,3879	1,5962
83,0	26,78	781,25	200,1	326,57	398,21	1,3934	1,5946
84,0	27,32	771,12	207,6	328,67	397,85	1,3991	1,5928
85,0	27,88	760,45	215,7	330,81	397,40	1,4049	1,5909
86,0	28,44	749,13	224,4	333,02	396,87	1,4109	1,5886
87,0	29,02	737,05	233,9	335,30	396,22	1,4170	1,5862
88,0	29,60	724,02	244,3	337,68	395,44	1,4234	1,5833
89,0	30,20	709,82	255,9	340,16	394,49	1,4300	1,5800
90,0	30,80	694,07	269,1	342,79	393,32	1,4370	1,5762
91,0	31,42	676,19	284,5	345,62	391,85	1,4446	1,5715
92,0	32,05	655,08	303,0	348,76	389,94	1,4529	1,5657
93,0	32,69	628,37	327,3	352,43	387,26	1,4626	1,5578
94,0	33,35	588,07	365,1	357,39	382,79	1,4759	1,5451

Calculated by Refprop version 10.0

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