

R 227ea

1,1,1,2,3,3,3-Heptafluoropropane



Saturated Pressure Table

temperature [°C]	pressure [bar]	density [kg/m ³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
		liquid	vapour	liquid	vapour	liquid	vapour
-35,0	0,419	1606,9	3,698	162,23	301,72	0,8525	1,4382
-34,0	0,441	1603,7	3,881	163,28	302,36	0,8569	1,4385
-33,0	0,464	1600,4	4,071	164,33	303,01	0,8613	1,4388
-32,0	0,489	1597,1	4,269	165,38	303,66	0,8657	1,4391
-31,0	0,514	1593,8	4,474	166,43	304,31	0,8700	1,4394
-30,0	0,540	1590,5	4,687	167,49	304,96	0,8743	1,4397
-29,0	0,567	1587,2	4,908	168,54	305,60	0,8787	1,4400
-28,0	0,595	1583,9	5,137	169,60	306,25	0,8830	1,4404
-27,0	0,624	1580,5	5,374	170,66	306,90	0,8873	1,4408
-26,0	0,655	1577,2	5,620	171,72	307,55	0,8916	1,4412
-25,0	0,686	1573,8	5,875	172,78	308,20	0,8959	1,4416
-24,0	0,719	1570,5	6,139	173,85	308,85	0,9001	1,4420
-23,0	0,753	1567,1	6,412	174,91	309,50	0,9044	1,4424
-22,0	0,788	1563,7	6,695	175,98	310,15	0,9086	1,4429
-21,0	0,825	1560,3	6,987	177,05	310,80	0,9129	1,4433
-20,0	0,863	1556,9	7,290	178,12	311,45	0,9171	1,4438
-19,0	0,902	1553,5	7,602	179,20	312,10	0,9214	1,4443
-18,0	0,943	1550,1	7,926	180,27	312,75	0,9256	1,4448
-17,0	0,985	1546,6	8,260	181,35	313,41	0,9298	1,4453
-16,0	1,028	1543,1	8,605	182,43	314,06	0,9340	1,4458
-15,0	1,073	1539,7	8,961	183,51	314,71	0,9382	1,4464
-14,0	1,120	1536,2	9,329	184,60	315,36	0,9423	1,4469
-13,0	1,168	1532,7	9,708	185,69	316,01	0,9465	1,4475
-12,0	1,218	1529,2	10,10	186,77	316,66	0,9507	1,4480
-11,0	1,269	1525,7	10,50	187,86	317,31	0,9548	1,4486
-10,0	1,322	1522,1	10,92	188,96	317,96	0,9590	1,4492
-9,0	1,377	1518,6	11,35	190,05	318,61	0,9631	1,4498
-8,0	1,434	1515,0	11,79	191,15	319,26	0,9672	1,4504
-7,0	1,492	1511,4	12,25	192,25	319,90	0,9714	1,4510
-6,0	1,552	1507,9	12,72	193,35	320,55	0,9755	1,4516
-5,0	1,614	1504,2	13,21	194,45	321,20	0,9796	1,4523
-4,0	1,678	1500,6	13,70	195,56	321,85	0,9837	1,4529
-3,0	1,744	1497,0	14,22	196,66	322,50	0,9878	1,4536
-2,0	1,812	1493,3	14,75	197,77	323,14	0,9919	1,4542
-1,0	1,882	1489,7	15,29	198,89	323,79	0,9959	1,4549
0,0	1,954	1486,0	15,85	200,00	324,43	1,0000	1,4556
1,0	2,028	1482,3	16,43	201,12	325,08	1,0041	1,4562
2,0	2,104	1478,6	17,02	202,24	325,72	1,0081	1,4569
3,0	2,182	1474,8	17,63	203,36	326,37	1,0122	1,4576
4,0	2,263	1471,1	18,26	204,48	327,01	1,0162	1,4583
5,0	2,346	1467,3	18,91	205,61	327,65	1,0202	1,4590

R 227ea

1,1,1,2,3,3,3-Heptafluoropropane



Saturated Pressure Table

temperature [°C]	pressure [bar]	density [kg/m ³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
		liquid	vapour	liquid	vapour	liquid	vapour
6,0	2,431	1463,5	19,57	206,74	328,30	1,0243	1,4597
7,0	2,519	1459,7	20,25	207,87	328,94	1,0283	1,4605
8,0	2,609	1455,9	20,95	209,00	329,58	1,0323	1,4612
9,0	2,701	1452,1	21,67	210,14	330,22	1,0363	1,4619
10,0	2,796	1448,2	22,41	211,28	330,85	1,0403	1,4627
11,0	2,893	1444,3	23,17	212,42	331,49	1,0443	1,4634
12,0	2,993	1440,4	23,95	213,56	332,13	1,0483	1,4641
13,0	3,096	1436,5	24,75	214,71	332,76	1,0523	1,4649
14,0	3,201	1432,6	25,58	215,86	333,40	1,0563	1,4656
15,0	3,309	1428,6	26,42	217,01	334,03	1,0603	1,4664
16,0	3,420	1424,6	27,29	218,16	334,66	1,0643	1,4672
17,0	3,533	1420,6	28,18	219,32	335,29	1,0682	1,4679
18,0	3,649	1416,6	29,09	220,48	335,92	1,0722	1,4687
19,0	3,769	1412,5	30,03	221,65	336,55	1,0761	1,4695
20,0	3,891	1408,4	31,00	222,81	337,18	1,0801	1,4702
21,0	4,016	1404,3	31,98	223,98	337,80	1,0841	1,4710
22,0	4,144	1400,2	33,00	225,15	338,43	1,0880	1,4718
23,0	4,275	1396,1	34,04	226,33	339,05	1,0919	1,4726
24,0	4,410	1391,9	35,11	227,50	339,67	1,0959	1,4733
25,0	4,547	1387,7	36,20	228,69	340,29	1,0998	1,4741
26,0	4,688	1383,4	37,33	229,87	340,90	1,1037	1,4749
27,0	4,832	1379,2	38,48	231,06	341,52	1,1077	1,4757
28,0	4,979	1374,9	39,66	232,25	342,13	1,1116	1,4765
29,0	5,130	1370,6	40,87	233,44	342,74	1,1155	1,4773
30,0	5,284	1366,2	42,12	234,64	343,35	1,1194	1,4780
31,0	5,442	1361,8	43,39	235,84	343,96	1,1233	1,4788
32,0	5,603	1357,4	44,70	237,04	344,56	1,1273	1,4796
33,0	5,768	1353,0	46,05	238,25	345,17	1,1312	1,4804
34,0	5,936	1348,5	47,42	239,46	345,77	1,1351	1,4812
35,0	6,108	1344,0	48,83	240,67	346,37	1,1390	1,4820
36,0	6,284	1339,4	50,28	241,89	346,96	1,1429	1,4827
37,0	6,463	1334,8	51,77	243,11	347,55	1,1468	1,4835
38,0	6,646	1330,2	53,29	244,33	348,14	1,1507	1,4843
39,0	6,833	1325,6	54,85	245,56	348,73	1,1546	1,4851
40,0	7,025	1320,9	56,45	246,79	349,32	1,1585	1,4858
41,0	7,220	1316,1	58,10	248,03	349,90	1,1623	1,4866
42,0	7,419	1311,3	59,78	249,27	350,48	1,1662	1,4874
43,0	7,622	1306,5	61,51	250,51	351,05	1,1701	1,4881
44,0	7,829	1301,6	63,29	251,76	351,62	1,1740	1,4889
45,0	8,041	1296,7	65,11	253,01	352,19	1,1779	1,4896

R 227ea

1,1,1,2,3,3,3-Heptafluoropropane



Saturated Pressure Table

temperature [°C]	pressure [bar]	density [kg/m ³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
		liquid	vapour	liquid	vapour	liquid	vapour
46,0	8,257	1291,8	66,98	254,27	352,76	1,1818	1,4904
47,0	8,477	1286,8	68,90	255,53	353,32	1,1857	1,4911
48,0	8,701	1281,7	70,86	256,79	353,87	1,1896	1,4919
49,0	8,930	1276,6	72,88	258,06	354,43	1,1935	1,4926
50,0	9,164	1271,4	74,96	259,34	354,98	1,1974	1,4933
51,0	9,402	1266,2	77,08	260,61	355,52	1,2013	1,4940
52,0	9,645	1260,9	79,27	261,90	356,06	1,2051	1,4947
53,0	9,892	1255,6	81,52	263,19	356,60	1,2090	1,4954
54,0	10,14	1250,2	83,82	264,48	357,13	1,2129	1,4961
55,0	10,40	1244,8	86,19	265,78	357,65	1,2168	1,4968
56,0	10,66	1239,2	88,62	267,08	358,17	1,2207	1,4975
57,0	10,93	1233,7	91,13	268,39	358,69	1,2246	1,4981
58,0	11,20	1228,0	93,70	269,70	359,19	1,2286	1,4988
59,0	11,48	1222,3	96,34	271,02	359,70	1,2325	1,4994
60,0	11,76	1216,5	99,06	272,35	360,19	1,2364	1,5001
61,0	12,05	1210,6	101,9	273,68	360,69	1,2403	1,5007
62,0	12,34	1204,6	104,7	275,02	361,17	1,2442	1,5013
63,0	12,64	1198,6	107,7	276,36	361,65	1,2482	1,5019
64,0	12,94	1192,5	110,8	277,71	362,11	1,2521	1,5024
65,0	13,25	1186,2	113,9	279,07	362,58	1,2560	1,5030
66,0	13,56	1179,9	117,2	280,43	363,03	1,2600	1,5035
67,0	13,88	1173,5	120,5	281,81	363,47	1,2639	1,5040
68,0	14,21	1167,0	123,9	283,19	363,91	1,2679	1,5045
69,0	14,54	1160,3	127,5	284,57	364,34	1,2719	1,5050
70,0	14,87	1153,6	131,2	285,97	364,75	1,2759	1,5055
71,0	15,22	1146,7	135,0	287,37	365,16	1,2799	1,5059
72,0	15,57	1139,7	138,9	288,78	365,56	1,2839	1,5063
73,0	15,92	1132,6	143,0	290,20	365,94	1,2879	1,5067
74,0	16,28	1125,3	147,2	291,63	366,31	1,2919	1,5071
75,0	16,65	1117,9	151,5	293,07	366,67	1,2960	1,5074
76,0	17,02	1110,3	156,0	294,52	367,02	1,3000	1,5077
77,0	17,40	1102,6	160,7	295,98	367,35	1,3041	1,5079
78,0	17,79	1094,7	165,6	297,46	367,67	1,3082	1,5082
79,0	18,18	1086,5	170,6	298,94	367,97	1,3123	1,5084
80,0	18,58	1078,2	175,9	300,44	368,25	1,3165	1,5085
81,0	18,99	1069,6	181,3	301,95	368,52	1,3207	1,5086
82,0	19,40	1060,8	187,1	303,48	368,76	1,3249	1,5087
83,0	19,83	1051,8	193,0	305,02	368,98	1,3291	1,5087
84,0	20,25	1042,5	199,3	306,58	369,18	1,3333	1,5086
85,0	20,69	1032,8	205,8	308,16	369,36	1,3376	1,5085

R 227ea

1,1,1,2,3,3,3-Heptafluoropropane

TEGA

Saturated Pressure Table

page 4 of 4

temperature [°C]	pressure [bar]	density [kg/m ³]		enthalpy [kJ/kg]		entropy [J/kg*K]	
		liquid	vapour	liquid	vapour	liquid	vapour
86,0	21,13	1022,8	212,7	309,76	369,50	1,3420	1,5083
87,0	21,58	1012,4	220,0	311,38	369,62	1,3464	1,5081
88,0	22,04	1001,6	227,6	313,03	369,70	1,3508	1,5077
89,0	22,51	990,37	235,7	314,70	369,75	1,3553	1,5073
90,0	22,98	978,56	244,3	316,41	369,75	1,3599	1,5068
91,0	23,46	966,13	253,5	318,15	369,71	1,3645	1,5061
92,0	23,95	952,99	263,3	319,93	369,62	1,3693	1,5053
93,0	24,45	939,00	273,9	321,75	369,46	1,3741	1,5044
94,0	24,96	924,01	285,4	323,64	369,23	1,3791	1,5033
95,0	25,48	907,77	298,0	325,59	368,90	1,3843	1,5019
96,0	26,01	889,98	312,0	327,63	368,46	1,3896	1,5002
97,0	26,54	870,15	327,8	329,77	367,88	1,3953	1,4982
98,0	27,09	847,52	346,2	332,07	367,08	1,4013	1,4956
99,0	27,65	820,71	368,3	334,60	365,97	1,4079	1,4922
100,0	28,22	786,76	397,2	337,52	364,32	1,4155	1,4874
101,0	28,80	736,33	442,6	341,34	361,34	1,4256	1,4790

Calculated by Refprop version 10.0

A guarantee, warranty or liability for the accuracy, completeness and timeliness of the content and information provided cannot be assumed.

revised 09.01.2020

TEGA – Technische Gase und Gasetechnik GmbH
Werner-von-Siemens-Straße 18
97076 Würzburg | Germany
www.tega.de

Telefon +49 931 2093-0
Telefax +49 931 2093-101
Email: info@tega.de

Geschäftsführer: Dr. Jürgen Zöller
Sitz: Würzburg - Registergericht: Würzburg, HRB 21
USt-IdNr.: DE 811145437

Deutsche Bank Würzburg

IBAN: DE707907001600202804 00
BIC: DEUTDEMM790

a **DCC** business