

# R-454A

Mengsel van R-32 en R-1234yf

DAMPDRUKTABEL

Temp. °C	Druk bar		Dichtheid kg/m <sup>3</sup>		Enthalpie kJ/kg		Entropie J/kg*K	
	vloeistof	gasvormig	vloeistof	gasvormig	vloeistof	gasvormig	vloeistof	gasvormig
-65,0	0,406	0,290	1313,7	1,376	110,50	370,43	0,6289	1,8992
-64,0	0,431	0,309	1311,0	1,457	111,81	371,06	0,6352	1,896
-63,0	0,456	0,328	1308,4	1,542	113,13	371,68	0,6414	1,8928
-62,0	0,483	0,349	1305,7	1,632	114,44	372,31	0,6477	1,8897
-61,0	0,511	0,370	1303,0	1,725	115,76	372,93	0,6539	1,8866
-60,0	0,540	0,392	1300,3	1,822	117,07	373,55	0,6600	1,8836
-59,0	0,570	0,416	1297,6	1,924	118,39	374,18	0,6662	1,8806
-58,0	0,602	0,440	1294,9	2,031	119,71	374,80	0,6723	1,8777
-57,0	0,636	0,466	1292,2	2,142	121,02	375,42	0,6784	1,8749
-56,0	0,670	0,493	1289,5	2,257	122,34	376,04	0,6845	1,8721
-55,0	0,706	0,521	1286,7	2,378	123,67	376,66	0,6906	1,8693
-54,0	0,744	0,551	1284,0	2,504	124,99	377,27	0,6966	1,8666
-53,0	0,784	0,582	1281,2	2,635	126,31	377,89	0,7026	1,8640
-52,0	0,824	0,614	1278,4	2,771	127,64	378,51	0,7086	1,8614
-51,0	0,867	0,647	1275,7	2,913	128,97	379,12	0,7146	1,8588
-50,0	0,912	0,682	1272,9	3,061	130,30	379,73	0,7205	1,8563
-49,0	0,958	0,719	1270,1	3,214	131,63	380,35	0,7265	1,8538
-48,0	1,006	0,757	1267,3	3,374	132,96	380,96	0,7324	1,8514
-47,0	1,056	0,797	1264,5	3,539	134,30	381,57	0,7383	1,8490
-46,0	1,107	0,838	1261,6	3,711	135,63	382,18	0,7442	1,8466
-45,0	1,161	0,881	1258,8	3,890	136,97	382,78	0,7500	1,8443
-44,0	1,217	0,926	1255,9	4,075	138,31	383,39	0,7559	1,8421
-43,0	1,275	0,973	1253,1	4,268	139,65	383,99	0,7617	1,8398
-42,0	1,335	1,021	1250,2	4,467	141,00	384,60	0,7675	1,8377
-41,0	1,397	1,071	1247,3	4,674	142,34	385,20	0,7733	1,8355
-40,0	1,461	1,124	1244,4	4,888	143,69	385,80	0,7791	1,8334
-39,0	1,528	1,178	1241,5	5,109	145,04	386,40	0,7848	1,8313
-38,0	1,597	1,234	1238,6	5,339	146,40	386,99	0,7906	1,8293
-37,0	1,669	1,292	1235,7	5,577	147,75	387,59	0,7963	1,8272
-36,0	1,743	1,353	1232,8	5,823	149,11	388,18	0,8020	1,8253
-35,0	1,819	1,415	1229,8	6,077	150,47	388,77	0,8077	1,8233
-34,0	1,898	1,480	1226,8	6,340	151,84	389,36	0,8134	1,8214
-33,0	1,980	1,548	1223,9	6,612	153,20	389,95	0,8191	1,8195
-32,0	2,065	1,617	1220,9	6,893	154,57	390,54	0,8247	1,8177
-31,0	2,152	1,689	1217,9	7,184	155,94	391,12	0,8304	1,8159
-30,0	2,242	1,764	1214,9	7,483	157,31	391,70	0,8360	1,8141
-29,0	2,335	1,841	1211,8	7,793	158,69	392,28	0,8416	1,8123
-28,0	2,430	1,921	1208,8	8,113	160,07	392,86	0,8472	1,8106
-27,0	2,529	2,003	1205,7	8,443	161,45	393,44	0,8528	1,8089
-26,0	2,631	2,088	1202,7	8,784	162,84	394,01	0,8584	1,8072
-25,0	2,736	2,176	1199,6	9,135	164,22	394,58	0,8640	1,8055

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Temp. °C	Druk bar		Dichtheid kg/m <sup>3</sup>		Enthalpie kJ/kg		Entropie J/kg*K	
	vloeistof	gasvormig	vloeistof	gasvormig	vloeistof	gasvormig	vloeistof	gasvormig
-24,0	2,844	2,267	1196,5	9,497	165,61	395,15	0,8695	1,8039
-23,0	2,956	2,360	1193,4	9,871	167,01	395,71	0,8751	1,8023
-22,0	3,070	2,457	1190,3	10,26	168,41	396,28	0,8806	1,8007
-21,0	3,189	2,557	1187,1	10,65	169,81	396,84	0,8861	1,7991
-20,0	3,310	2,659	1184,0	11,06	171,21	397,40	0,8916	1,7976
-19,0	3,435	2,765	1180,8	11,48	172,61	397,95	0,8971	1,7961
-18,0	3,564	2,874	1177,6	11,92	174,02	398,51	0,9026	1,7946
-17,0	3,696	2,987	1174,4	12,36	175,44	399,06	0,9081	1,7931
-16,0	3,832	3,102	1171,2	12,83	176,85	399,60	0,9136	1,7917
-15,0	3,972	3,221	1168,0	13,30	178,27	400,15	0,9191	1,7903
-14,0	4,115	3,344	1164,7	13,79	179,69	400,69	0,9245	1,7889
-13,0	4,263	3,470	1161,5	14,29	181,12	401,23	0,9300	1,7875
-12,0	4,414	3,600	1158,2	14,80	182,55	401,76	0,9354	1,7861
-11,0	4,569	3,734	1154,9	15,34	183,98	402,30	0,9408	1,7847
-10,0	4,729	3,871	1151,6	15,88	185,42	402,82	0,9462	1,7834
-9,0	4,893	4,012	1148,2	16,44	186,86	403,35	0,9516	1,7821
-8,0	5,061	4,157	1144,9	17,02	188,30	403,87	0,9570	1,7808
-7,0	5,233	4,306	1141,5	17,62	189,75	404,39	0,9624	1,7795
-6,0	5,409	4,459	1138,1	18,23	191,20	404,90	0,9678	1,7782
-5,0	5,590	4,616	1134,7	18,85	192,66	405,41	0,9732	1,7770
-4,0	5,776	4,778	1131,3	19,50	194,12	405,92	0,9786	1,7757
-3,0	5,966	4,944	1127,8	20,16	195,58	406,42	0,9839	1,7745
-2,0	6,161	5,114	1124,3	20,84	197,05	406,92	0,9893	1,7733
-1,0	6,360	5,288	1120,9	21,54	198,52	407,42	0,9947	1,7720
0,0	6,565	5,467	1117,3	22,26	200,00	407,91	1,0000	1,7708
1,0	6,774	5,650	1113,8	23,00	201,48	408,40	1,0053	1,7697
2,0	6,988	5,839	1110,2	23,76	202,97	408,88	1,0107	1,7685
3,0	7,207	6,032	1106,7	24,54	204,45	409,35	1,0160	1,7673
4,0	7,431	6,229	1103,1	25,34	205,95	409,83	1,0213	1,7662
5,0	7,661	6,432	1099,4	26,16	207,45	410,29	1,0267	1,7650
6,0	7,895	6,64	1095,8	27,01	208,95	410,76	1,0320	1,7639
7,0	8,135	6,852	1092,1	27,87	210,46	411,21	1,0373	1,7627
8,0	8,380	7,070	1088,4	28,76	211,97	411,67	1,0426	1,7616
9,0	8,631	7,293	1084,7	29,68	213,49	412,11	1,0479	1,7605
10,0	8,887	7,521	1080,9	30,62	215,01	412,56	1,0532	1,7594
11,0	9,149	7,755	1077,1	31,58	216,53	412,99	1,0585	1,7583
12,0	9,416	7,994	1073,3	32,57	218,07	413,42	1,0638	1,7571
13,0	9,690	8,239	1069,5	33,58	219,60	413,85	1,0691	1,7560
14,0	9,969	8,489	1065,6	34,63	221,15	414,27	1,0744	1,7549
15,0	10,25	8,746	1061,7	35,70	222,69	414,68	1,0797	1,7538

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	vloeistof	gasvormig	vloeistof	gasvormig	vloeistof	gasvormig	vloeistof	gasvormig
16,0	10,54	9,007	1057,8	36,80	224,25	415,08	1,0849	1,7527
17,0	10,84	9,275	1053,8	37,92	225,81	415,48	1,0902	1,7516
18,0	11,15	9,549	1049,8	39,08	227,37	415,87	1,0955	1,7505
19,0	11,45	9,829	1045,8	40,27	228,94	416,26	1,1008	1,7494
20,0	11,77	10,12	1041,7	41,49	230,52	416,64	1,1061	1,7483
21,0	12,09	10,41	1037,6	42,75	232,10	417,01	1,1114	1,7472
22,0	12,42	10,71	1033,5	44,03	233,69	417,37	1,1166	1,7461
23,0	12,76	11,01	1029,3	45,36	235,28	417,73	1,1219	1,7450
24,0	13,10	11,32	1025,1	46,71	236,88	418,08	1,1272	1,7439
25,0	13,44	11,64	1020,9	48,11	238,49	418,42	1,1325	1,7428
26,0	13,80	11,97	1016,6	49,54	240,10	418,75	1,1378	1,7417
27,0	14,16	12,30	1012,3	51,01	241,72	419,07	1,1431	1,7406
28,0	14,53	12,64	1007,9	52,52	243,35	419,39	1,1484	1,7394
29,0	14,91	12,99	1003,5	54,08	244,99	419,69	1,1537	1,7383
30,0	15,29	13,34	999,02	55,67	246,63	419,99	1,159	1,7371
31,0	15,68	13,70	994,52	57,31	248,28	420,27	1,1643	1,7360
32,0	16,08	14,07	989,97	59,00	249,94	420,55	1,1696	1,7348
33,0	16,48	14,45	985,36	60,74	251,6	420,81	1,1749	1,7336
34,0	16,89	14,83	980,71	62,52	253,28	421,07	1,1802	1,7324
35,0	17,31	15,22	976,01	64,35	254,96	421,31	1,1855	1,7312
36,0	17,74	15,62	971,24	66,24	256,65	421,54	1,1909	1,7300
37,0	18,17	16,03	966,42	68,18	258,35	421,76	1,1962	1,7287
38,0	18,61	16,44	961,54	70,18	260,06	421,97	1,2016	1,7274
39,0	19,07	16,87	956,60	72,23	261,78	422,16	1,2069	1,7262
40,0	19,52	17,30	951,59	74,35	263,51	422,35	1,2123	1,7249
41,0	19,99	17,74	946,52	76,53	265,25	422,51	1,2177	1,7235
42,0	20,46	18,19	941,37	78,78	267,00	422,67	1,2231	1,7222
43,0	20,95	18,65	936,15	81,09	268,76	422,81	1,2285	1,7208
44,0	21,44	19,11	930,85	83,48	270,53	422,93	1,2340	1,7194
45,0	21,93	19,59	925,47	85,94	272,32	423,04	1,2394	1,7180
46,0	22,44	20,07	920,00	88,48	274,12	423,13	1,2449	1,7165
47,0	22,96	20,57	914,45	91,11	275,93	423,20	1,2504	1,7150
48,0	23,48	21,07	908,80	93,82	277,75	423,26	1,2559	1,7135
49,0	24,02	21,59	903,05	96,61	279,59	423,29	1,2614	1,7119
50,0	24,56	22,11	897,19	99,51	281,45	423,31	1,2670	1,7103
51,0	25,11	22,64	891,23	102,5	283,32	423,30	1,2726	1,7087
52,0	25,67	23,19	885,15	105,6	285,20	423,28	1,2782	1,7070
53,0	26,24	23,74	878,95	108,8	287,10	423,23	1,2838	1,7052
54,0	26,81	24,31	872,62	112,1	289,02	423,15	1,2895	1,7034
55,0	27,4	24,88	866,15	115,6	290,96	423,05	1,2952	1,7016

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	vloeistof	gasvormig	vloeistof	gasvormig	vloeistof	gasvormig	vloeistof	gasvormig
56,0	28,00	25,47	859,53	119,2	292,92	422,92	1,3010	1,6997
57,0	28,60	26,07	852,76	122,9	294,90	422,77	1,3068	1,6977
58,0	29,22	26,68	845,82	126,8	296,91	422,58	1,3126	1,6957
59,0	29,84	27,3	838,71	130,8	298,93	422,36	1,3185	1,6935
60,0	30,48	27,93	831,40	135,0	300,99	422,10	1,3244	1,6913
61,0	31,12	28,58	823,90	139,4	303,07	421,81	1,3304	1,689
62,0	31,78	29,24	816,17	144,0	305,18	421,48	1,3365	1,6867
63,0	32,44	29,91	808,20	148,8	307,32	421,10	1,3426	1,6842
64,0	33,11	30,59	799,98	153,8	309,49	420,68	1,3489	1,6816
65,0	33,8	31,29	791,48	159,1	311,71	420,2	1,3552	1,6788
66,0	34,49	32,00	782,67	164,7	313,96	419,67	1,3616	1,676
67,0	35,20	32,73	773,51	170,6	316,26	419,08	1,3681	1,673
68,0	35,91	33,47	763,99	176,9	318,61	418,42	1,3747	1,6698
69,0	36,64	34,23	754,04	183,5	321,02	417,68	1,3814	1,6664
70,0	37,37	35,00	743,61	190,6	323,48	416,86	1,3884	1,6628
71,0	38,12	35,79	732,64	198,1	326,03	415,94	1,3955	1,6589
72,0	38,87	36,60	721,05	206,3	328,65	414,91	1,4028	1,6548
73,0	39,64	37,43	708,72	215,2	331,37	413,75	1,4103	1,6503
74,0	40,41	38,27	695,51	224,8	334,21	412,44	1,4182	1,6454
75,0	41,19	39,14	681,24	235,5	337,19	410,94	1,4265	1,6400
76,0	41,99	40,04	665,63	247,4	340,35	409,22	1,4352	1,634
77,0	42,78	40,96	648,28	261,0	343,75	407,19	1,4446	1,6271
78,0	43,59	41,91	628,51	276,8	347,47	404,77	1,4548	1,6192
79,0	44,39	42,90	605,15	295,9	351,69	401,76	1,4664	1,6097
80,0	45,19	43,94	575,64	320,6	356,75	397,77	1,4804	1,5974
81,0	45,94	45,07	532,28	357,8	363,81	391,67	1,500	1,5792

Benegas geeft geen garantie voor de juistheid en volledigheid van de getoonde informatie. Benegas is daarom niet aansprakelijk voor en kan niet worden gehouden aan, van of via deze documentatie betrokken informatie.

Berekend met Refprop Versie 10.0  
Herzien op 02-01-2020

Benegas B.V.  
Zuiderzeestraatweg 1  
Postbus 34 | 3880 AA Putten (NL)  
+31(0)341 72 33 50  
koudemiddelen@benegas.com  
[www.benegas.com](http://www.benegas.com)

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