

Pressure Temperature Charts



°F	°C	R-452A Liquid	R-452A Vapor
-40	-40.0	5.7	2.4
-35	-37.2	8.5	4.7
-30	-34.4	11.4	7.3
-25	-31.7	14.7	10.2
-20	-28.9	18.2	13.3
-15	-26.1	22.1	16.7
-10	-23.3	26.4	20.4
-5	-20.6	31.0	24.4
0	-17.8	35.9	28.8
5	-15.0	41.3	33.6
10	-12.2	47.1	38.8
15	-9.4	53.4	44.4
20	-6.7	60.1	50.4
25	-3.9	67.3	56.9
30	-1.1	75.0	63.8
35	1.7	83.2	71.3
40	4.4	92.0	79.2
45	7.2	101	87.8
50	10.0	111	96.9

°F	°C	R-452A Liquid	R-452A Vapor
55	12.8	122	107
60	15.6	133	117
65	18.3	145	128
70	21.1	157	140
75	23.9	171	152
80	26.7	185	165
85	29.4	199	179
90	32.2	215	194
95	35.0	231	209
100	37.8	248	226
105	40.6	267	243
110	43.3	286	261
115	46.1	305	281
120	48.9	326	301
125	51.7	348	322
130	54.4	371	345
135	57.2	395	369
140	60.0	420	394

Vapor Pressure in PSIG

Refrigerant Boiling Point

Refrigerant		BP
R-452A	R-125 (59%), R-1234yf (30%), R-32 (11%) Pentafluoroethane, 2,3,3,3-Tetrafluoroprop-1-ene, Difluoromethane	-52.6°F

Liquid Density

Refrigerant		-80°F	-40°F	0°F	40°F	80°F	120°F
R-452A	#/cu. ft.	91.03	86.58	81.77	76.37	69.99	61.69
	#/gal.	12.17	11.57	10.93	10.21	9.36	8.25

Physical Properties

	R-452A
Environmental Classification	HFC/HFO Zeotropic Blend
Molecular Weight	103.5
Boiling Point (1atm,°F)	-52.6
Critical Pressure (psia)	580.4
Critical Temperature (°F)	166.8
Critical Density (lb./ft ³)	30.98
Vapor Density (bp,lb./ft ³)	0.305
Heat of Vaporization (bp,BTU/lb.)	83.04
Global Warming Potential (CO ₂ = 1.0)	1945
ASHRAE Standard 34 Safety Rating	A1