

Pressure Temperature Charts



°F	°C	R-507
-40	-40.0	5.5
-35	-37.2	8.2
-30	-34.4	11.1
-25	-31.7	14.3
-20	-28.9	17.8
-15	-26.1	21.7
-10	-23.3	25.8
-5	-20.6	30.3
0	-17.8	35.2
5	-15.0	40.5
10	-12.2	46.1
15	-9.4	52.2
20	-6.7	58.8
25	-3.9	65.8
30	-1.1	73.3
35	1.7	81.3
40	4.4	89.8
45	7.2	98.9
50	10.0	109
55	12.8	119

°F	°C	R-507
60	15.6	130
65	18.3	141
70	21.1	154
75	23.9	167
80	26.7	180
85	29.4	195
90	32.2	210
95	35.0	226
100	37.8	244
105	40.6	262
110	43.3	281
115	46.1	301
120	48.9	322
125	51.7	344
130	54.4	368
135	57.2	393
140	60.0	419
145	62.8	446
150	65.6	475

Vapor Pressure in PSIG

Refrigerant Boiling Point

Refrigerant	Components	BP
R-507	R-125 (50%), R-143a (50%) Pentafluoroethane, 1,1,1-Trifluoroethane	-52.8°F

Liquid Density

Refrigerant		-80°F	-40°F	0°F	40°F	80°F	120°F
R-507	#/cu. ft.	-	80.9	76.3	71.2	65	56.7
	#/gal.	-	11.9	10.2	9.5	8.7	7.6

Physical Properties

	R-507
Environmental Classification	HFC
Molecular Weight	98.9
Boiling Point (1atm, °F)	-52.8
Critical Pressure (psia)	539
Critical Temperature (°F)	159
Critical Density (lb./ft ³)	30.7
Vapor Density (bp, lb./ft ³)	0.349
Heat of Vaporization (bp, BTU/lb.)	84.35
Global Warming Potential (CO ₂ = 1.0)	3985
ASHRAE Standard 34 Safety Rating	A1