

Pressure Temperature Charts



°F	°C	R-513A
-40	-40.0	12.1
-35	-37.2	9.4
-30	-34.4	6.5
-25	-31.7	3.3
-20	-28.9	0.1
-15	-26.1	2.1
-10	-23.3	4.2
-5	-20.6	6.6
0	-17.8	9.1
5	-15.0	11.9
10	-12.2	15.0
15	-9.4	18.3
20	-6.7	21.9
25	-3.9	25.9
30	-1.1	30.1
35	1.7	34.6
40	4.4	39.6
45	7.2	44.8
50	10.0	50.5
55	12.8	56.5

°F	°C	R-513A
60	15.6	63.0
65	18.3	69.9
70	21.1	77.3
75	23.9	85.1
80	26.7	93.4
85	29.4	102
90	32.2	112
95	35.0	121
100	37.8	132
105	40.6	143
110	43.3	155
115	46.1	167
120	48.9	180
125	51.7	193
130	54.4	207
135	57.2	222
140	60.0	238
145	62.8	254
150	65.6	271

Vapor Pressure in PSIG

In Vacuum (inches in Hg)

Refrigerant Boiling Point

Refrigerant	Components	BP
R-513A	R-1234yf (56%), R-134a (44%) 2,3,3,3-Tetrafluoroprop-1-ene, 1,1,1,2-Tetrafluoroethane	-20.6°F

Liquid Density

Refrigerant		-80°F	-40°F	0°F	40°F	80°F	120°F
R-513A	#/cu. ft.	90.19	86.32	82.21	77.73	72.69	66.76
	#/gal.	12.06	11.54	10.99	10.39	9.72	8.92

Physical Properties

	R-513A
Environmental Classification	HFC/HFO Zeotropic Blend
Molecular Weight	108.4
Boiling Point (1atm, °F)	-20.6
Critical Pressure (psia)	546
Critical Temperature (°F)	174
Critical Density (lb./ft ³)	32.26
Vapor Density (bp, lb./ft ³)	0.3530
Heat of Vaporization (bp, BTU/lb.)	84.3
Global Warming Potential (CO ₂ = 1.0)	573
ASHRAE Standard 34 Safety Rating	A1