

# Pressure Temperature Charts



°F	°C	R-450A Liquid	R-450A Vapor
-40	-40.0	16.5	16.9
-35	-37.2	14.4	14.9
-30	-34.4	12.2	12.6
-25	-31.7	9.6	10.2
-20	-28.9	6.7	7.3
-15	-26.1	3.5	4.3
-10	-23.3	0.0	0.8
-5	-20.6	1.9	1.5
0	-17.8	4.0	3.6
5	-15.0	6.3	5.8
10	-12.2	8.9	8.3
15	-9.4	11.6	11.0
20	-6.7	14.6	13.9
25	-3.9	17.9	17.1
30	-1.1	21.4	20.6
35	1.7	25.2	24.3
40	4.4	29.4	28.4
45	7.2	33.8	32.8
50	10.0	38.6	37.5

°F	°C	R-450A Liquid	R-450A Vapor
55	12.8	43.7	42.5
60	15.6	49.2	47.9
65	18.3	55.1	53.7
70	21.1	61.4	59.9
75	23.9	68.1	66.5
80	26.7	75.2	73.5
85	29.4	82.8	81.0
90	32.2	90.9	89.0
95	35.0	99.4	97.4
100	37.8	109	106
105	40.6	118	116
110	43.3	128	126
115	46.1	139	136
120	48.9	150	148
125	51.7	162	159
130	54.4	175	172
135	57.2	188	185
140	60.0	202	199

Vapor Pressure in PSIG

In Vacuum (inches in Hg)

## Refrigerant Boiling Point

Refrigerant	Components	BP
R-450A	R-1234ze (58%), R-134a (42%) Trans-1,3,3,3-Tetrafluoroprop-1-ene, 1,1,1,2-Tetrafluoroethane	-9.6°F

## Liquid Density

Refrigerant		-80°F	-40°F	0°F	40°F	80°F	120°F
R-450A	#/cu. ft.	89.59	85.87	81.96	77.77	73.13	67.76
	#/gal.	11.98	11.49	10.96	10.40	9.78	9.06

## Physical Properties

	R-450A
Environmental Classification	HFC/HFO Zeotropic Blend
Molecular Weight	108.6
Boiling Point (1atm, °F)	-9.6
Critical Pressure (psia)	554
Critical Temperature (°F)	219.9
Critical Density (lb./ft <sup>3</sup> )	30.73
Vapor Density (bp, lb./ft <sup>3</sup> )	0.3398
Heat of Vaporization (bp, BTU/lb.)	87.55
Global Warming Potential (CO <sub>2</sub> = 1.0)	547
ASHRAE Standard 34 Safety Rating	A1