

Pressure Temperature Charts



°F	°C	R-401A Liquid	R-401A Vapor
-40	-40.0	8.1	13.2
-35	-37.2	5.1	10.7
-30	-34.4	1.7	7.9
-25	-31.7	1	4.8
-20	-28.9	3	1.4
-15	-26.1	5.2	1.2
-10	-23.3	7.7	3.3
-5	-20.6	10.3	5.5
0	-17.8	13.2	8
5	-15.0	16.3	10.7
10	-12.2	19.7	13.7
15	-9.4	23.4	16.9
20	-6.7	27.4	20.4
25	-3.9	31.7	24.2
30	-1.1	36.4	28.3
35	1.7	41.3	32.8
40	4.4	46.6	37.6
45	7.2	52.4	42.7
50	10.0	58.5	48.2
55	12.8	65	54.1

°F	°C	R-401A Liquid	R-401A Vapor
60	15.6	71.9	60.4
65	18.3	79.3	67.2
70	21.1	87.1	74.4
75	23.9	95.4	82.1
80	26.7	104	90.2
85	29.4	114	98.9
90	32.2	123	108
95	35.0	134	118
100	37.8	145	128
105	40.6	156	139
110	43.3	169	151
115	46.1	181	163
120	48.9	195	176
125	51.7	209	189
130	54.4	224	203
135	57.2	239	218
140	60.0	255	234
145	62.8	272	250
150	65.6	290	267

Vapor Pressure in PSIG

In Vacuum (inches in Hg)

Refrigerant Boiling Point

Refrigerant		BP
R-401A	R-22 (53%), R-124 (34%), R-152a (13%) Chlorodifluoromethane, 1-Chloro-1,2,2,2-Tetrafluoroethane, 1,1-Difluoroethane	-29.9°F

Liquid Density

Refrigerant		-80°F	-40°F	0°F	40°F	80°F	120°F
R-401A	#/cu. ft.	90.43	86.68	82.75	78.53	73.88	68.55
	#/gal.	12.09	11.59	11.06	10.50	9.88	9.16

Physical Properties

	R-401A
Environmental Classification	HCFC
Molecular Weight	94.4
Boiling Point (1atm,°F)	-29.9
Critical Pressure (psia)	669
Critical Temperature (°F)	221
Critical Density (lb./ft ³)	30.9
Vapor Density (bp,lb./ft ³)	0.306
Heat of Vaporization (bp,BTU/lb.)	97.5
Global Warming Potential (CO ₂ = 1.0)	1182
ASHRAE Standard 34 Safety Rating	A1