Pressure Temperature Charts

°F	°C	R-427A
-40	-40.0	2.2
-35	-37.2	4.5
-30	-34.4	7.0
-25	-31.7	9.7
-20	-28.9	12.8
-15	-26.1	16.1
-10	-23.3	19.7
-5	-20.6	23.6
0	-17.8	27.9
5	-15.0	32.5
10	-12.2	37.6
15	-9.4	43.0
20	-6.7	48.8
25	-3.9	55.0
30	-1.1	61.7
35	1.7	68.9
40	4.4	76.6
45	7.2	84.8
50	10.0	93.5
55	12.8	102.8

°F	°C	R-427A
60	15.6	112.7
65	18.3	123.2
70	21.1	134.4
75	23.9	146.2
80	26.7	158.6
85	29.4	171.8
90	32.2	185.7
95	35.0	200.4
100	37.8	215.8
105	40.6	232.1
110	43.3	249.1
115	46.1	267.1
120	48.9	285.9
125	51.7	305.5
130	54.4	326.2
135	57.2	347.7
140	60.0	370.2
145	62.8	393.7
150	65.6	418.2

Vapor Pressure in PSIG

Refrigerant Boiling Point

Refrigerant	Components	BP (0 PSIG):
R-427A	R-134a (50%, **1,1,1,2-Tetrafluoroethane**) R-125 (25%, **Pentafluoroethane**) R-32 (15%, **Difluoromethane**) R-143a (10%, **1,1,1-Trifluoroethane**)	Liquid → -45.3°F Vapor → -33.2°F

Liquid Density

Refrigerant:	Liquid Density:	-80°F	-40°F	0°F	40°F	80°F	120°F
R-427A	lb/cu. ft.	89.1	84.9	80.5	75.6	70.0	63.1
	lb/gal.	11.9	11.3	10.8	10.1	9.4	8.4

Physical Properties

	R-427A
Environmental Classification	HFC
Molecular Weight	90.444 g/mol
Boiling Point (1atm, °F)	Liquid → -45.3 Vapor → -33.2
Critical Pressure (psia)	639.1
Critical Temperature (°F)	185.9
Critical Density (lb./ft^ 3)	30.6
Vapor Density (bp, lb./ft^ 3)	0.3
Liquid Heat of Vaporization (bp, BTU/lb.)	61.2
Ozone Depletion Potential (CFC 11 - 1.0)	0
Global Warming Potential (CO2 = 1.0)	2024
ASHRAE Standard 34 Safety Rating	A1

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