

Pressure Temperature Charts



°F	°C	R-1270
-140	-95.6	-13.9
-130	-90.0	-3.4
-120	-84.4	-12.8
-110	-78.9	-12.0
-100	-73.3	-10.9
-90	-67.8	-9.4
-80	-62.2	-7.5
-70	-56.7	-5.1
-60	-51.1	-2.1
-50	-45.6	1.5
-40	-40	5.9
-30	-34.4	11.2
-20	-28.9	17.5
-10	-23.3	24.8
0	-17.8	33.4
10	-12.2	43.2
20	-6.7	54.6
30	-1.1	67.5

°F	°C	R-1270
40	4.4	82.1
50	10	98.5
60	15.6	116.9
70	21.1	137.4
80	26.7	160.1
90	32.2	185.3
100	37.8	213.0
110	43.3	243.4
120	48.9	276.8
130	54.4	313.1
140	60	352.8
150	65.6	395.9

Vapor Pressure in PSIG

Refrigerant Boiling Point

Refrigerant	Components	BP
R-1270	R-1270 (>99.5%) Propylene	-54.4°F

Liquid Density

Refrigerant		-80°F	-40°F	0°F	40°F	80°F	120°F
R-1270	lb./ft. ³	39.1	37.4	35.6	33.6	31.3	28.6
	lb./gal.	5.2	5.0	4.8	4.5	4.2	3.8

Physical Properties

	R-1270
Environmental Classification	Hydrocarbon
Molecular Weight	42.09 g/mole
Boiling Point (1 atm, °F)	-54.4°F
Critical Pressure (psia)	676.5 psia
Critical Temperature (°F)	197.3°F
Critical Density (lb./ft. ³)	13.95 lb./ft. ³
Vapor Density (bp, lb./ft. ³)	0.1454 lb./ft. ³
Heat of Vaporization (bp, btu/lb.)	188.9 btu/lb.
Ozone Depletion Potential	0
Global Warming Potential (CO ₂ = 1.0)	1.8 *
ASHRAE Standard 34 Safety Rating	A3

*GWP numbers are updated periodically. Please refer to EPA or ASHRAE for the latest information.