

Pressure Temperature Charts



°F	°C	R-1150
-150	-101.1	2.4
-145	-98.3	5.3
-140	-95.6	8.6
-135	-92.8	12.2
-130	-90.0	16.2
-125	-87.2	20.7
-120	-84.4	25.7
-115	-81.7	31.1
-110	-78.9	37.1
-105	-76.1	43.7
-100	-73.3	50.9
-95	-70.6	58.7
-90	-67.8	67.1
-85	-65.0	76.3
-80	-62.2	86.2
-75	-59.4	96.9
-70	-56.7	108.3
-65	-53.9	120.6
-60	-51.1	133.8
-55	-48.3	147.9

°F	°C	R-1150
-50	-45.6	162.9
-45	-42.8	178.9
-40	-40.0	195.9
-35	-37.2	214.0
-30	-34.4	233.1
-25	-31.7	253.4
-20	-28.9	274.9
-15	-26.1	297.6
-10	-23.3	321.6
-5	-20.6	346.8
0	-17.8	373.4
5	-15.0	401.5
10	-12.2	430.9
15	-9.4	462.0
20	-6.7	494.6
25	-3.9	528.8
30	-1.1	564.9
35	1.7	602.8
40	4.4	642.7

Vapor Pressure in PSIG

Refrigerant Boiling Point

Refrigerant:	Components:	BP (0 PSIG):
R-1150	R-1150 (>99.9%) Ethylene	-154.8°F

Liquid Density

Refrigerant	Liquid Density:	-80°F	-40°F	0°F	40°F	80°F	120°F
R-1150	lb/cu. ft.	31.4	28.8	25.4	19.6	N/A	N/A
	lb/gal.	4.2	3.9	3.4	2.6	N/A	N/A

Physical Properties

	R-1150
Environmental Classification	Specialty
Molecular Weight	28.1 g/mol
Boiling Point (1atm, °F)	-154.8
Critical Pressure (psia)	731.3
Critical Temperature (°F)	48.6
Critical Density (lb./ft ³)	13.4
Vapor Density (bp, lb./ft ³)	1
Liquid Heat of Vaporization (bp, BTU/lb.)	0.0000015
Ozone Depletion Potential (CFC 11 - 1.0)	0
Global Warming Potential (CO2 = 1.0)	<5
ASHRAE Standard 34 Safety Rating	A3