

Pressure Temperature Charts



°F	°C	R-170
-200	-128.9	-13.9
-190	-123.3	-13.3
-180	-117.8	-12.5
-170	-112.2	-11.4
-160	-106.7	-9.8
-150	-101.1	-7.6
-140	-95.6	-4.8
-130	-90.0	-1.1
-120	-84.4	3.6
-110	-78.9	9.4
-100	-73.3	16.5
-90	-67.8	25.2
-80	-62.2	35.6
-70	-56.7	47.8
-60	-51.1	62.2
-50	-45.6	78.9
-40	-40	98.1
-30	-34.4	120.0

°F	°C	R-170
-20	-28.9	144.9
-10	-23.3	173.0
0	-17.8	204.5
10	-12.2	239.7
20	-6.7	278.9
30	-1.1	322.3
40	4.4	370.2
50	10	422.9
60	15.6	480.9
70	21.1	544.7
80	26.7	614.8

Vapor Pressure in PSIG

Refrigerant Boiling Point

Refrigerant	Components	BP
R-170	R-170 (>98.5%) Ethane	-128.2°F

Liquid Density

Refrigerant		-80°F	-40°F	0°F	40°F	80°F
R-170	lb./ft. ³	31.8	29.7	27.4	24.3	19.0
	lb./gal.	4.3	4.0	3.7	3.3	2.5

Physical Properties

	R-170
Environmental Classification	Hydrocarbon
Molecular Weight	30.08 g/mole
Boiling Point (1 atm, °F)	-128.2°F
Critical Pressure (psia)	706.7 psia
Critical Temperature (°F)	90.2°F
Critical Density (lb./ft. ³)	12.87 lb./ft. ³
Vapor Density (bp, lb./ft. ³)	0.1256 lb./ft. ³
Heat of Vaporization (bp, btu/lb.)	210.6 btu/lb.
Ozone Depletion Potential	0
Global Warming Potential (CO ₂ = 1.0)	10 *
ASHRAE Standard 34 Safety Rating	A3

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