

Pressure Temperature Charts



°F	°C	R-227ea
-40	-40.0	-10.1
-35	-37.2	-9.3
-30	-34.4	-8.5
-25	-31.7	-7.5
-20	-28.9	-6.5
-15	-26.1	-5.3
-10	-23.3	-4.0
-5	-20.6	-2.5
0	-17.8	-0.9
5	-15.0	0.8
10	-12.2	2.8
15	-9.4	4.9
20	-6.7	7.2
25	-3.9	9.7
30	-1.1	12.5
35	1.7	15.4
40	4.4	18.6
45	7.2	22.1
50	10.0	25.8
55	12.8	29.9

°F	°C	R-227ea
60	15.6	34.2
65	18.3	38.8
70	21.1	43.7
75	23.9	49.0
80	26.7	54.7
85	29.4	60.7
90	32.2	67.1
95	35.0	73.9
100	37.8	81.1
105	40.6	88.8
110	43.3	96.9
115	46.1	105.4
120	48.9	114.5
125	51.7	124.0
130	54.4	134.1
135	57.2	144.7
140	60.0	155.9
145	62.8	167.6
150	65.6	180.0

Vapor Pressure in PSIG

Refrigerant Boiling Point

Refrigerant:	Components:	BP (0 PSIG):
R-227ea	R-227ea (100%) 1,1,1,2,3, 3,3-Heptafluoropropane	2.6°F

Liquid Density

Refrigerant:	Liquid Density:	-80°F	-40°F	0°F	40°F	80°F	120°F
R-227ea	lb/cu. ft.	105.7	101.3	96.7	91.7	86.2	79.7
	lb/gal.	14.1	13.5	12.9	12.3	11.5	10.7

Physical Properties

	R-227ea
Environmental Classification	HFC
Molecular Weight	170.04 g/mol
Boiling Point (1atm, °F)	2.6
Critical Pressure (psia)	424.2
Critical Temperature (°F)	215.2
Critical Density (lb./ft ³)	37.1
Vapor Density (bp, lb./ft ³)	0.5
Liquid Heat of Vaporization (bp, BTU/lb.)	78.3
Ozone Depletion Potential (CFC 11 - 1.0)	0
Global Warming Potential (CO ₂ = 1.0)	3350
ASHRAE Standard 34 Safety Rating	A1