

# Pressure Temperature Charts



°F	°C	R-600a
-70	-56.7	<b>-13.1</b>
-60	-51.1	<b>-12.4</b>
-50	-45.6	<b>-11.6</b>
-40	-40	<b>-10.6</b>
-30	-34.4	<b>-9.3</b>
-20	-28.9	<b>-7.6</b>
-10	-23.3	<b>-5.6</b>
0	-17.8	<b>-3.2</b>
10	-12.2	<b>-0.3</b>
20	-6.7	<b>3.1</b>
30	-1.1	<b>7.1</b>
40	4.4	<b>11.8</b>
50	10	<b>17.3</b>
60	15.6	<b>23.5</b>
70	21.1	<b>30.6</b>
80	26.7	<b>38.6</b>
90	32.2	<b>47.7</b>
100	37.8	<b>57.9</b>

°F	°C	R-600a
110	43.3	<b>69.3</b>
120	48.9	<b>81.9</b>
130	54.4	<b>95.9</b>
140	60	<b>111.3</b>
150	65.6	<b>128.2</b>
160	71.1	<b>146.7</b>
170	76.7	<b>167.0</b>
180	82.2	<b>189.0</b>
190	87.8	<b>213.0</b>
200	93.3	<b>239.0</b>
210	98.9	<b>267.2</b>
220	104.4	<b>297.7</b>

**Vapor Pressure in PSIG**

## Refrigerant Boiling Point

Refrigerant	Components	BP
R-600a	R-600a (>99.5%) Isobutane	10.4°F

## Liquid Density

Refrigerant		-80°F	-40°F	0°F	40°F	80°F	120°F
R-600a	lb./ft. <sup>3</sup>	40.4	39.0	37.5	35.9	34.2	32.3
	lb./gal.	5.4	5.2	5.0	4.8	4.6	4.3

## Physical Properties

	R-600a
Environmental Classification	Hydrocarbon
Molecular Weight	58.14 g/mole
Boiling Point (1 atm, °F)	10.4°F
Critical Pressure (psia)	527.9 psia
Critical Temperature (°F)	274.7°F
Critical Density (lb./ft. <sup>3</sup> )	14.01 lb./ft. <sup>3</sup>
Vapor Density (bp, lb./ft. <sup>3</sup> )	0.1744 lb./ft. <sup>3</sup>
Heat of Vaporization (bp, btu/lb.)	157.5 btu/lb.
Ozone Depletion Potential	0
Global Warming Potential (CO <sub>2</sub> = 1.0)	20 *
ASHRAE Standard 34 Safety Rating	A3

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