

Physical Properties of Refrigerants	R-438A
Environmental Classification	HFC
Molecular Weight	99.1
Boiling Point (1atm, °F)	-44.2
Critical Pressure (psia)	624.3
Critical Temperature (°F)	185.5
Critical Density(lb./ft <sup>3</sup> )	31.9
Liquid Density (70 °F,lb./ft <sup>3</sup> )	72.6
Vapor Density (bp,lb./ft <sup>3</sup> )	0.239
Heat of Vaporization(bp,BTU/lb.)	91.2
Specific Heat Liquid( 20 °F, BTU/lb. °F)	
Specific Heat Vapor (1atm, 70 °F,BTU/lb. °F)	
Ozone Depletion Potential (CFC 11 -1.0)	0
Global Warming Potential (CO <sub>2</sub> = 1.0)	2265
ASHRAE Standard 34 Safety Rating	A1

Pressure- Temp  
Chart

Temp °F	Liquid	Vapor
-40	1.7	2.6
-35	3.9	0.8
-30	6.4	1.2
-25	9.1	3.5
-20	12	5.9
-15	14.3	8.6
-10	18.8	11.6
-5	22.7	14.99
0	26.8	18.5
5	31.4	22.4
10	36.3	26.6
15	41.6	31.2
20	47.3	36.2
25	53.4	41.6
30	59.9	47.5
35	67	53.7
40	74.5	60.5
45	82.5	67.8
50	91.1	75.5
55	100	83.8
60	110	92.7
65	120	102
70	131	112
75	143	134
80	155	134
85	168	146
90	181	159
95	196	173
100	211	187
105	226	202
110	243	219
115	261	235
120	279	253
125	298	253
130	319	292
135	340	313
140	362	335
145	n/a	n/a
150	n/a	n/a

# R-438A

*This information is believed to be accurate and reliable but is provided for guidance only. A-Gas accepts no responsibility and the user assumes all risks and liability for use of this information.*