

Physical Properties of Refrigerants

R600a (Iso Butane)

Pressure- Temp Chart

Enviromental Classification	CFCs
Formula	CH(CH ₃) ₂ CH ₃
Molecular Weight	58.1
Boiling Point (101.3 kpa, °C)	-11.7
Freezing point (°C)	-138.5
Critical Pressure (kpa)	36.45
Critical Temperature (°C)	135
Critical Denisty (g/cm ³)	0.221
Lower Flamability Limit (% By Volume)	1.8
Lower Flamability Limit Weigh (Kg/m ³)	0.043
Autongiatiion Temerature (°C)	460
Latent Heat 25 °C (KJ/Kg.K)	332
Liquid density 30 (kg/m ³)	560
Vapour Density (air = 1.0)	2.9
Specific Heat Liquid 30 °C (KJ/Kg.K)	2.38
Vaporization Heat at boiling point (KJ/Kg)	366.5
Ozone Depletion Potential (CFC 11 -1.0)	0
Global Warming Potential (CO ₂ = 1.0)	0.1
ASHRAE Standard 34 Safety Rating	A3

Temp °C	R600a (Iso Butane)
-28.9	15.4
-26.1	13.5
-23.3	11.4
-20.6	9.0
-17.8	6.4
-15.0	3.6
-12.2	0.6
-9.4	1.4
-6.7	3.2
-3.9	5.1
-1.1	7.2
1.7	9.4
4.4	11.9
7.2	14.5
10.0	17.3
12.8	20.3
15.6	23.5
18.3	27.0
21.1	30.6
23.9	34.5
26.7	38.7
29.4	43.1
32.2	47.8
35.0	52.7
37.8	57.9
40.6	63.5
43.3	69.3
46.1	75.5
48.9	81.9
51.7	88.8
54.4	95.9
57.2	103
60.0	111
62.8	120
65.6	128

This information is believed to be accurate and reliable but is provided for guidance only.

Tiba International For Refrigeration accepts no responsibility and the user assumes all risks and liability for use of this information.