

Physical Properties of Refrigerants

R143a

Environmental Classification	HCFCs
Formula	HCFCs
Molecular Weight	CH 3CF 3
Boiling Point (101.3 kpa, °C)	84.04
Freezing point (°C)	-47.2
Critical Pressure (kpa)	-111
Critical Temperature (°C)	3.78
Critical Density(kg/m ³)	72.9
Liquid Density 30°C (kg/m ³)	1.176
Vapour Density (air = 1.0)	1300
Vapour pressure at 25°C (Bar)	2.9
Specific Heat Liquid 30 °C (KJ/Kg.K)	165psia@21°C
Specific Heat Vapor 25 °C (KJ/Kg.K)	1.31
Ozone Depletion Potential (CFC 11 -1.0)	0
Global Warming Potential (CO ₂ = 1.0)	1.1
ASHRAE Standard 34 Safety Rating	A2

Pressure- Temp Chart

Temp °C	R143a psig
-106.7	-14.4
-106.1	-14.4
-105.6	-14.4
-105.0	-14.4
-104.4	-14.4
-103.9	-14.4
-103.3	-14.3
-102.8	-14.3
-102.2	-14.3
-101.7	-14.3
-101.1	-14.3
-100.6	-14.2
-100.0	-14.2
-99.4	-14.2
-98.9	-14.2
-93.3	-14.1
-97.8	-14.1
-97.2	-14.1
-96.7	-14.7
-96.1	-14.0
-95.6	-14.0
-95.0	-14.0

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

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