

### Physical Properties of Refrigerants

### R1233 ZD

Environmental Classification	HFO
Formula	CF <sub>3</sub> CH=CHCl
Molecular Weight	130.5
Boiling Point (101.3 kpa, °C)	18.3
Freezing point (°C)	-107
Critical Pressure (kpa)	3.6
Critical Temperature (°C)	165.5
Critical Density(kg/m <sup>3</sup> )	478.92
Liquid Density 30°C (kg/m <sup>3</sup> )	1.26
Vapour Density (air = 1.0)	0.825
Vapour pressure at 25°C ( Bar )	129.8
Specific Heat Liquid 30 °C (KJ/Kg.K)	1.243
Specific Heat Vapor 25 °C (KJ/Kg.K)	192
Ozone Depletion Potential (CFC 11 -1.0)	0
Global Warming Potential (CO <sub>2</sub> = 1.0)	1
ASHRAE Standard 34 Safety Rating	A1

### Pressure- Temp Chart

Temp °C	R1233 ZD psig
-28.9	26.7
-26.1	26.1
-23.3	25.5
-20.6	24.7
-17.8	23.9
-15.0	23.0
-12.2	21.8
-9.4	20.8
-6.7	19.4
-3.9	17.9
-1.1	16.5
1.7	14.7
4.4	12.6
7.2	10.6
10.0	8.4
12.8	5.7
15.6	2.9
18.3	0.0
21.1	1.6
23.9	3.4
26.7	5.3
29.4	7.3
32.2	9.5
35.0	11.9
37.8	14.4
40.6	17.1
43.3	20.0
46.1	23.1
48.9	26.5
51.7	30.0
54.4	33.8
57.2	37.7
60.0	42.0
62.8	46.5
65.6	51.3

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

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