

REFRIGERANT FACT SHEET R410A

CHARACTERISTICS

R410A is a non-flammable HFC blend refrigerant, developed for use in air conditioning equipment, specifically designed for R410A.

R410A is not suitable for retrofitting due to higher operating pressures.

Heatcraft recommends alternative refrigerants with substantially lower GWP.

PERFORMANCE

- R410A is not suitable for retrofitting due to the higher operating pressures
- · Charging must be done in the liquid phase
- Systems designed for R410A can take advantage of its ability to use smaller components
- Low glide makes R41A suitable for some centrifugal compressors and it can operate in low temperature applications
- R32 is a recommended lower GWP alternative

APPLICATIONS

Low, medium and high temperature applications including:

- · Domestic and commercial air conditioning equipment
- Chillers
- Heat pumps



PHYSICAL ATTRIBUTES

ODP: 0 GWP: 1725 Class/ Type: Zeotropic blend (A1) Refrigerant Kind: HFC Blend Oil Type: Polyolester Oil (POE) Glide: 0.1K

FEATURES

- A substitute for R22, but CANNOT be retrofitted due to higher pressure
- Higher efficiency compared to R22
- · Non-ozone depleting
- Contains R32

THERMODYNAMIC PERFORMANCE

- R410A provides higher efficiency in domestic air conditioning compared to R22
- Operates at approximately 60% higher pressure than R22

PRODUCT PART NUMBERS

- H410010 10kg Cylinder
- H410018 18kg Cylinder
- H410050 50kg Cylinder

For safety, handling and storage guidelines please refer to the MSDS (available on Chemwatch)







PRESSURE **TEMPERATURE CHART**

Temp C°	Pressure (kPa)
-44	46
-42	61
-40	76
-38	93
-36	111
-34	130
-32	150
-30	172
-28	195
-26	219
-24	245
-22	273
-20	303
-18	334
-16	367
-16	402
-12	438
-10	477
-8	518
-6	561
-4	607
-2	654
0	704
2	757
4	812
6	869
8	930
10	993
12	1059
14	1128
16	1200
18	1275
20	1353
22	1435
24	1520
26	1608
28	1701
30	1797
32	1896
34	2000
36	2108
38	2220
40	2336
40	2456
42	2581
44	2710
48	2844
50	2983

information.

PHYSICAL PROPERTIES

Class/ Type	Zeotropic blend
Formula	50% R125/ 50% R32
Kind	HFC blend
Appearance	Colourless
ODP	0
GWP	1725
ASHRAE Std. 34 Safety Class	A1

Units	AHRI Specification
Molecular Weight	72.6
Boiling Point	-51.5°C
Critical Temperature	71.8°C
Critical Pressure	49 bar
Critical Volume	0.00205 m³/ kg
Critical Density	488.90 kg/m ³
Saturated Liquid Density at 30°C	1033.19 kg/m ³



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