# 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.

Gas2Go® 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 R410A suitable for some centrifugal compressors and it can operate in low temperature applications
- R32 is a recommended lower GWP alternative
- Always check OEM guidelines that the equipment has been designed to take R32 as an alternative

### **APPLICATIONS**



Air Conditioning

- Commercial
- Domestic



Water Chillers

· Process cooling

### PHYSICAL ATTRIBUTES



ODP: 0GWP: 1725



Class/Type: Zeotropic blend (A1)

Refrigerant Kind: HFC BlendOil 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 information please refer to the MSDS (available on Chemwatch)

This information is believed to be accurate and reliable, but is provided as a guide only.

Beijer Ref Holdings Australia Pty Ltd (T/A Beijer Ref Support) accepts no responsibility and
the end user assumes all risks and liability for the use of this information.

# 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
-14	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
42	2456
42	2581
46	2710
48	2844
50	2983
50	2700

# 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 m <sup>3</sup> / kg
Critical Density	488.90 kg/m <sup>3</sup>
Saturated Liquid Density at 30°C	1033.19 kg/m³

### **OUR SERVICES**







Gas2Go® Gas Doctor Analysis



Gas2Find™ Leak Detection



Gas2Go® Reclaim & Gas2Go® Pumpdown

### YOUR LOCAL HVAC&R REFRIGERANT SPECIALIST



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Access to Nationwide Technical Support



ARCtick Reporting