REFRIGERANT FACT SHEET
R404A

CHARACTERISTICS

R404A is a non-flammable HFC blend refrigerant suitable for use in low and medium refrigeration temperature applications.

R404A was developed as a zero ODP refrigerant to replace R502 and R22.

Gas2Go recommends alternative refrigerants with substantially lower GWP.

PHYSICAL ATTRIBUTES

- **ODP:** 0
- **GWP:** 3922
- **Class/ Type:** Zeotropic blend (A1)
- **Refrigerant Kind:** HFC Blend
- **Oil Type:** Polyolester Oil (POE)
- **Glide:** 0.9K

PERFORMANCE

- Must be charged from the liquid phase to ensure accurate composition
- Changing to POE required and it may be necessary to carry out multiple lubricant flushes in some systems
- R404A is considered as a high GWP refrigerant, recommended alternatives include R448A and R407F

FEATURES

- Non-flammable (A1)
- Comparable physical and thermodynamic properties to R502
- Can be used in new installations as well as retrofitting of existing equipment
- Requires liquid charge

APPLICATIONS

Low Temperature Refrigeration
- Cold storage

Medium Temperature Refrigeration
- Commercial

THERMODYNAMIC PERFORMANCE

- Provides similar performance in refrigeration systems using R22 in low and medium temperature applications
- Lower discharge temperature than R22 especially in low temperature applications
- Less efficient than R134a
- Poor performance at high ambient temperatures

PRODUCT PART NUMBERS

- **H404010** 10kg Cylinder
- **H404018** 18kg Cylinder
- **H404050** 50kg Cylinder
- **H404400** 400kg 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

C°	Pressure (kPa)
-44	4
-42	15
-40	26
-38	39
-36	52
-34	66
-32	81
-30	97
-28	114
-26	133
-24	152
-22	173
-20	195
-18	219
-16	243
-14	270
-12	297
-10	326
-8	357
-6	390
-4	424
-2	460
0	498
2	537
4	579
6	623
8	669
10	716
12	766
14	819
16	873
18	929
20	989
22	1049
24	1119
26	1179
28	1249
30	1329
32	1399
34	1479
36	1559
38	1639
40	1729
42	1819
44	1909
46	2009
48	2109
50	2209

PHYSICAL PROPERTIES

Class/ Type	Zeotropic blend
Formula	52% R134a/ 44% R124/ 4% R134a
Kind	HFC Blend
Appearance	Colourless
ODP	0
GWP	3922
Ashrae Std. 34 Safety Class	A1

Units	AHRI Specification
Molecular Weight	97.6 kg/mol
Boiling Point	– 46.2°C
Triple Point	200°C
Critical Temperature	72.2°C
Critical Pressure	36.7 bar
Critical Density	484 kg/m^3
Critical Volume	0.00206 m^3/kg

OUR SERVICES

Gas2Go®
Refrigerant Management

Gas2Go®
Gas Doctor Analysis

Gas2Find™
Leak Detection

Gas2Go® Reclaim &
Gas2Go® Pumpdown

YOUR LOCAL HVAC&R REFRIGERANT SPECIALIST

OVER 70 BRANCHES

Available from all Kirby and Beijer Ref branches Australia wide

Certified System Quality ISO 9001

Quality Control to ISO9001

Access to Nationwide Technical Support

ARCtick Reporting

Gas2Go®

Beijer Ref Support
2 Kirby Place, Bankstown Aerodrome NSW 2200. Tel: +61 2 9774 7013. Email: info@beijerref.com.au