REFRIGERANT FACT SHEET
R22

CHARACTERISTICS

R22 is an ozone-depleting, non-flammable HCFC refrigerant being phased out in accordance with Australia's obligation to the Montreal Protocol on substances that deplete the ozone layer.

The aim is to reduce supplies to nil by 2030.

Gas2Go® recommends alternative refrigerants with substantially lower GWP.

PERFORMANCE

- R22 is considered an 'end of life' refrigerant
- R22 is being phased out as part of the HCFC phase-out, resulting in limitations being placed on imports, which consequentiality limits availability
- Systems designed for R22 are not suitable for R410A, as the system would need to be designed to handle the higher pressures
- Systems designed for R22 can be retrofitted to R407C.
- Alternatives to R22 include R134a, R404A, R407F, R448A and R410A
- Low GWP alternatives include R32 and R1234ze (only for new systems).
- Regular servicing of systems using R22 is essential to minimise leaks.

APPLICATIONS

Note: Not suitable for new applications due to the HCFC phase out

Low Temperature Refrigeration
- Chest or upright freezer

Medium Temperature Refrigeration
- Commercial
- Domestic
- Cold stores

Air Conditioning
- Cold storage

Water Chillers

PHYSICAL ATTRIBUTES

- **ODP:** 0.55
- **GWP:** 1700
- **Class/ Type**: Single component (A1)
- **Refrigerant Kind:** HCFC
- **Oil Type:** Polyolester (POE) and alkylbenzene (AB)
- **Glide:** N/A

FEATURES

- Non-flammable
- R22 can be charged from the liquid or vapour stage
- No glide
- Large application range

THERMODYNAMIC PERFORMANCE

- High-efficiency refrigerant
- Higher compressor discharge temperature in comparison to HFCs
- Low energy requirement
- Similar thermal loads to R134a and R404A

PRODUCT PART NUMBERS

- **H220012** 12kg Cylinder
- **H220022** 22kg Cylinder
- **H220065** 65kg Cylinder
- **H220450** 450kg 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	-13
-42	-5
-40	5
-38	15
-36	26
-34	38
-32	50
-30	63
-28	78
-26	93
-24	109
-22	126
-20	145
-18	164
-16	185
-14	207
-12	230
-10	254
-8	280
-6	307
-4	336
-2	366
0	397
2	431
4	466
6	502
8	540
10	581
12	622
14	666
16	712
18	760
20	810
22	862
24	916
26	972
28	1031
30	1092
32	1155
34	1221
36	1289
38	1360
40	1433
42	1509
44	1588
46	1670
48	1754
50	1842

PHYSICAL PROPERTIES

Class/Type	Single Component
Formula	100% R22
Kind	HCFC
Appearance	Colourless
ODP	0.55
GWP	1700
ASHRAE Std. 34 Safety Class	A1

Units	AHRI Specification
Molecular Weight	86.5 kg/mol
Boiling Point	– 40.8°C
Triple Point	115.73 °C
Critical Temperature	96.2°C
Critical Pressure	49.9 bar
Critical Pressure	0.0019m^3/kg
Critical Density	523.8 kg/m^3

OUR SERVICES

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