

REFRIGERANT FACT SHEET R22

CHARACTERISTICS

R22 is an ozone-depleating, 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.

Heatcraft 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, R422D, and R438A
- 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.

THERMODYNAMIC PERFORMANCE

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

PHYSICAL ATTRIBUTES

ODP: 0.55

GWP: 1700

Class/ Type: Single component (A1)

Refrigerant Kind: HCFC

Oil Type: Mineral Oil, Polyolester (POE) and alkylbenzene (AB)

Glide: N/A

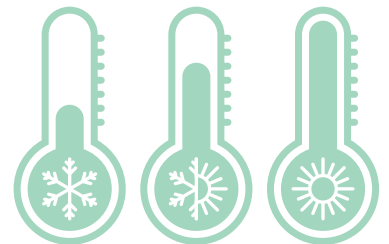
FEATURES

- Non-flammable
- R22 can be charged from the liquid or vapour stage
- R22 systems are typically charged with mineral oil
- No glide
- Large application range

APPLICATIONS

Low, medium and high temperature commercial/ residential applications including:

- Commercial refrigeration
- Chillers
- Transport refrigeration
- Air conditioning
- Chest or upright freezers



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)

PRESSURE TEMPERATURE CHART

Temp 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	Units	AHRI Specification
Formula	100% R22	Molecular Weight	86.5 kg/mol
Kind	HCFC	Boiling Point	- 40.8°C
Appearance	Colourless	Triple Point	115.73 °C
ODP	0.55	Critical Temperature	96.2°C
GWP	1700	Critical Pressure	49.9 bar
ASHRAE Std. 34 Safety Class	A1	Critical Pressure	0.0019m³/kg
		Critical Density	523.8 kg/m³

Gas2GO®

- Quality control ISO9001
- Local manufacture and decanting
- ARCTick Reporting
- Access to Kirby refrigerant technical library
- Refrigerant recovery with zero emissions
- Distribution and delivery nationally
- Cylinder management at your fingertips through the Gas2Go app
- Refrigerant sample analysis