# REFRIGERANT FACT SHEET R407F



# **CHARACTERISTICS**

R407F is a non-flammable HFC blend refrigerant developed for use in low and medium temperature commercial refrigeration applications.

R407F can be used as a suitable replacement for R404A.

Gas2Go<sup>®</sup> recommends alternative refrigerants with substantially lower GWP.

### PERFORMANCE

- R407F has been shown to be more efficient than R404A in many applications, with a lower GWP R407F delivers both environmental gains and lower energy costs
- R407F is a suitable retrofit replacement for R22, R404A and R502
- Retrofitting process is straightforward, with no need to replace TX valves in most applications (follow guidelines)
- Approved by major compressor manufacturers (check OEM guidelines)
- Alternatives include R448A

## **APPLICATIONS**





• Cold storage



Medium Temperature Refrigeration

Commercial

# **PHYSICAL ATTRIBUTES**



- **ODP:** 0
- **GWP:** 1824
- Class/Type: Zeotropic blend (A1)
- Refrigerant Kind: HFC Blend
- Oil Type: Polyolester Oil (POE)
- **Glide:** ~ 4K

### **FEATURES**

- Non-flammable (A1)
- Lower GWP than R404A
- Higher efficiency than R404A
- Liquid charge only
- Suitable for use in new and retrofit applications

#### THERMODYNAMIC PERFORMANCE

- Greater efficiency than R404A, with energy savings of up to 10 15% in many applications
- Similar cooling capacity to R404A
- Higher discharge temperature than R404A at low temperatures
- R407F can reduce CO<sub>2</sub> emissions by up to 40%

### **PRODUCT PART NUMBERS**

- H407F10 10kg Cylinder
- H407F50 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°	Dew (kPa)	Pressure (kPa)
-44	-20	11
-42	-11	22
-40	-2	34
-38	9	47
-36	20	60
-34	32	75
-32	45	91
-30	59	108
-28	74	126
-26	90	145
-24	107	166
-22	125	188
-20	145	211
-18	166	235
-16	188	261
-14	211	289
-12	237	318
-10	263	348
-8	291	381
-6	321	415
-4	353	450
-2	386	488
0	421	528
2	458	569
4	497	613
6	538	659
8	581	706
10	626	757
12	674	809
14	723	864
16	723	921
18	830	960
20		1043
20	888 947	1043
24	1010	1175
24	1075	1245
28	1143	1318
30	1215	1394
32	1289	1473
34	1366	1555
36	1447	1640
38	1531	1729
40	1618	1820
42	1709	1915
44	1803	2013
46	1902	2115
48	2004	2221
50	2110	2330

#### **PHYSICAL PROPERTIES**

Class/ Type	Zeotropic blend
Formula	40% R134a/ 30% R32/ 30% R125
Kind	HFC Blend
Appearance	Colourless
ODP	0
GWP	1824
ASHRAE Std. 34 Safety Class	A1

Units	AHRI Specification
Molecular Weight	82.1 kg/mol
Boiling Point	-46.1°C
Critical Temperature	83°C
Critical Pressure	47.54 bar
Critical Volume	0.0021 m³/ kg
Critical Density	477.4 kg/m <sup>3</sup>
Vapour Density at Boiling Point	4.47 kg/m <sup>3</sup>
Liquid Density at 0°C	1117 kg/m³
Liquid Viscosity	143.99 µPa-sec
Vapour Viscosity	13.20 µPa-sec

# **OUR SERVICES**









Gas2Go® Refrigerant Management Gas2Go®

Gas2Find™ Leak Detection

Gas2Go® Reclaim & Gas2Go<sup>®</sup> Pumpdown

Gas Doctor Analysis

#### **YOUR LOCAL HVAC&R REFRIGERANT SPECIALIST**











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