



## R-22

(CHLORODIFLUOROMETHANE CHF<sub>2</sub>CL)

### GUARANTEED COMMERCIAL SPECIFICATIONS

Standard specifications	Limit value
Guaranteed purity	≥ 99.5 % weight
Chloride ion test	negative
Water content	≤ 10 ppm weight
Acidity (HCl)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume
High-boiling residues	≤ 0.01 % volume

### MAIN APPLICATIONS

**R-22** is a "hydrochlorofluorocarbon" (HCFC) compound with strong latent heat of vaporisation, extensively used in residential, commercial, and industrial air conditioning. It is also used at low temperature (down to - 40°C) for freezing and deep-freezing. In energy recovery, it allows to realise heat pumps with hot sources in middle thermal ranges (+55°C maximum).

### OILS

Use a mineral (MN) or alkylbenzene (AB) oil for low temperatures of evaporation. Check with **Climalife** regarding the viscosity of the oil selected for your application, and the miscibility with the fluid under consideration.

### PRECAUTIONS OF USE

Refer to the Safety Data Sheet\*.

### REGULATION

Using **R-22** is governed by European regulation n° 2037/2000 of June 29, 2000:

- using **R-22** is completely prohibited in new setup as of 12.31.2003
- using virgin **R-22** is prohibited for maintenance and service as of 01.01.2010
- using **R-22**, even recycled, is completely prohibited as of 01.01.2015.

In Europe, **R-22** recovery is mandatory as per regulation n° 842/2006.  
(Refer to regulations enforced in each country)

\* Find the Safety Data Sheet (SDS) directly on our website [www.climalife.dehon.com](http://www.climalife.dehon.com)



R-22

climalife®

## R-22 PHYSICOCHEMICAL PROPERTIES

Molar mass	g/mol	86.47
Melting temperature	°C	- 157.42
Boiling point (under 1.013 bar)	°C	- 40.81
Temperature drift under 1.013 bar	K	0
Vapour pressure at: 25°C 50°C	bar	10.44 19.43
Critical temperature	°C	96.15
Critical pressure	absolute bar	49.9
Critical density	kg/m <sup>3</sup>	523.8
Latent heat of vaporisation at boiling point	kJ/kg	233.7
Thermal conductivity at 25°C - liquid - Vapour under 1.013 bar	W/(m.K)	0.08365 0.01058
Surface tension at 25°C	10 <sup>-3</sup> N/m	8.08
Solubility at 25°C - of the fluid in water under 1.013 bar - of water in the fluid	% weight % weight	0.3 0.13
Fluid viscosity at 25°C	10 <sup>-3</sup> Pa-s	0.1658
Specific heat capacity at 25°C - liquid - Vapour under 1.013 bar	kJ/(kg.K) kJ/(kg.K)	1.257 0.662
Dielectric rigidity at 23°C and under 1.013 bar		1.3
Kauri-butanol index		25
Cp/Cv ratio at 25°C under 1.013 bar		1.185
Flammability in air		non-flammable
Flashing point		none
NF-EN 378 classification		L1
Potential effect on ozone	(R11 = 1)	0.055

Please contact your distributor or **Climalife** sales department for more information. Also, if the refrigerated system you want to install does not appear to you as a typical case, we are at your service to provide opinions and advices.

The information contained in this product sheet is the result of our studies and experience. It is provided in good faith, but should not, under any circumstance, be taken to constitute a guarantee on our part or an assumption of our responsibility. This is particularly the case when third party rights are at stake or in situations where a user of one of our products fails to observe applicable regulations.

For more information, please visit our website:

[http://www.climalife.dehon.com/contact\\_us](http://www.climalife.dehon.com/contact_us)

Copyright© 2013 - dehon service SA - All rights reserved.