Réf. : FF.48/10.13/V4/ EN

R-142b

(1-CHLORO 1,1 DIFLUOROETHANE CH_3-CF_2CL)

GUARANTEED COMMERCIAL SPECIFICATIONS

standard specifications	limit value
Purity	≥ 99,85 % weight
Water content	≤ 15 ppm weight
Chloride ion test	negative
Acidity (HCl)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1,5 % volume
High-boiling residues	≤ 0.01 % volume

MAIN APPLICATIONS

R-142b is a "hydrochlorofluorocarbon" (HCFC) compound used as refrigerant fluid mainly in heat pump applications; it is a substitute for R-114 (CFC), which it can replace in some instances.

It is also used in R-142b/R-22 mixture, replacing R-12 in some applications.

OILS

Use a polyalphaolefin (PAO) oil.

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-142b** is governed by European regulation n° 2037/2000 of June 29, 2000:

- using **R-142b** is completely prohibited in new setups as of 12.31.2003
- using virgin **R-142b** is prohibited for maintenance and service as of 01.01.2010
- using **R-142b**, even recycled, is completely prohibited as of 01.01.2015.

In Europe, **R-142b** 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***

R-142B PHYSICOCHEMICAL PROPERTIES

Molar mass	g/mol	100.5
Melting point	°C	- 131.15
Boiling point (under 1.013 bar)	°C	- 9
Critical temperature Critical pressure Critical density	°C bar kg/m3	131.1 41.23 435
Latent heat of vaporisation at boiling point	kJ/kg	222.7
Thermal conductivity at 30°C Liquid Vapour under 1.013 bar	W/(m.K)	 0.07954 0.01161
Surface tension at 25°C	10-3 N/m	11.41
Viscosity at 25°C Liquid Vapour under 1.013 bar	10-3 Pa-s	 0.238 0.009912
Specific heat at 25°C Liquid Vapour under 1.013 bar	kJ/(kg.K) kJ/(kg.K)	 1.292 0.8529
Cp/Cv ratio at 25°C under 1.013 bar		1.126
Flammability in air Explosive limits	Lower limit Higher limit	9% volume 14.8% volume
Flashing point		none
NF-EN 378 Classification		L2
Potential effect on ozone	(R-11 = 1)	0.065

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.

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