REf. : FF.58 /03.15/V7/ EN

R-134a

1,1,1,2 – TETRAFLUOROETHANE CF_3-CH_2F

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Purity	≥ 99.5% weight
Water content	≤ 10 ppm weight
Non-condensable content (gas phase)	≤ 1,5 % volume
Chlorine ion test	Negative
High boiling residues	≤ 0.01 % volume
Acitity (HCl)	≤ 1 ppm weight

MAIN APPLICATIONS

R-134a is a hydrofluorocarbon (HFC) which can be used for domestic, commercial and industrial refrigerated applications, as well as for air conditioning, fluid cooling and heat pump applications.

R-134a is the fluid of choice of automotive and agricultural air-conditioning system manufacturers.

This fluid can also replace R-12 in existing systems by following the correct conversion procedure.

OILS

Use a polyol ester (POE).

Check with **Climalife** regarding the viscosity of the oil selected for your application and the miscibility with the fluid under consideration.

For automotive air conditioning, please refer to the constructor's advice: PAG oils are generally the recommended type.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet*.

REGULATION

The use and implementation of R-134a are governed by EU Regulation n° 517/2014.

The recovery of R-134a is mandatory under EU Regulation n° 517/2014.

(Refer to regulations enforced in each country.)

Find the Safety Data Sheet (SDS) directly on our website **www.climalife.dehon.com*

R-134a PHYSICAL PROPERTIES

Molar mass	g/mol	102,03
Melting point	°C	- 103,3
Boiling point (at 1.013 bar)	°C	- 26,08
Temperature glide at 1.013 bar	K	0
Saturated liquid density at 25°C	kg/m^3	1207
Saturated vapour density at boiling point	kg/m^3	5,257
Vapour pressure at : 25°C 50°C	 bar bar	 6,654 13,18
Critical temperature Critical pressure Critical density	°C bar kg/m^3	101,06 40,59 512
Latent heat of vapourisation at boiling point	kJ/kg	217
Thermal conductivity of liquid at 25°C Thermal conductivity of vapour at 1.013 bar	W/(m.K) W/(m.K)	0,08113 0,01339
Surface tension at 25°C	10^{-3}N/m	8,08
Solubility of the fluid in water at 25°C Solubility of water in the fluid at 1.013 bar	% weight % weight	0,09 0,097
Viscosity of liquid at 25°C Viscosity of vapour at 1.013 bar	10^{-3}Pa-s 10^{-3}Pa-s	0,198 0,012
Specific heat of liquid at25°C Specific heat of vapour at 1.013 bar	kJ/(kg.K) kJ/(kg.K)	1,425 0,8512
Cp/Cv ratio at 25°C at 1.013 bar		1,119
Flammability in air		Non-flammable
Flash point	°C	None
NF-EN 378 classification		L1
Ozone Depletion Potential	(R11 = 1)	0
GWP	(CO_2 = 1)	1430

Please contact your distributor or our **Climalife** sales department for more information. In addition, if the refrigeration system you want to install, or are working on, does not appear to be a typical installation, please do not hesitate to contact us for advice and information.