



R-507A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Composition R-125 R-143a	50 % (+1,5% - 0,5%) 50 % (+0,5% - 1,5%)
Guaranteed purity	≥ 99.5 % volume
Water content	≤ 10 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-507A is an "azeotropic" HFC blend. It is typically used in industrial refrigeration applications including those with flooded evaporators, such as ice skating rinks.

OILS

Use a polyol ester (POE) 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

The use and implementation of R-507A are governed by EU Regulation n° 517/2014.

The recovery of R-507A is mandatory under EU Regulation n° 517/2014.

(Refer to the regulations enforced in each country)

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



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R-507A PHYSICAL PROPERTIES

Molar mass	g/mol	98.86
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-47.1
Temperature glide at 1.013 bar	K	0
Liquid density at 25°C	kg/m ³	1049
Vapour density at 1.013 bar	kg/m ³	5.585
Vapour pressure at: 25°C	bar	12.88
50°C	bar	23.65
Critical temperature	°C	70.75
Critical pressure	bar	37.15
Critical density	kg/m ³	492.5
Latent heat of vaporisation at boiling point	kJ/kg	196
Thermal conductivity of liquid at 25°C	W/(m.K)	0.0663
Thermal conductivity of Vapour at 1.013 bar	W/(m.K)	0.0145
Surface tension at 25°C	10 ⁻³ N/m	4.4
Viscosity of liquid at 25°C	10 ⁻³ Pa-s	0.125
Viscosity of vapour at 1.013 bar	10 ⁻³ Pa-s	0.01216
Specific heat of Liquid at 25°C	kJ/(kg.K)	1.536
Specific heat of Vapour at 1.013 bar	kJ/(kg.K)	0.870
Cp/Cv ratio at 25°C and 1.013 bar		1.114
Flammability in air		Non-flammable
Flash point	°C	None
NF-EN 378 classification		L1
Ozone Depletion Potential	(R-11 = 1)	0
GWP	(CO ₂ = 1)	3985

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.

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

