

















# **R-507**

## **GUARANTEED COMMERCIAL SPECIFICATIONS**

STANDARD SPECIFICATIONS	LIMIT VALUE	
Composition		
R-125	50 % (±1 %)	
R-143a	50 % (±1 %)	
Guaranteed purity	≥ 99 % volume	
Water content	≤ 15 ppm weight	
Chloride ion test	negative	
Acidity (HCI)	≤ 1 ppm weight	
Non-condensable content (gas phase)	≤ 1.5 % volume	

## **MAIN APPLICATIONS**

R-507 is a HFC type "azeotropic" replacing mixture. It is essentially used in industrial refrigeration for new setups including flooded evaporators, such as in skating rings.

## **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**

In Europe, R-507 recovery is mandatory as per regulation n° 842/2006. (Refer to regulations enforced in each country)

 $<sup>^{*}</sup>$  Find the Safety Data Sheet (SDS) directly on our website  ${\it www.climalife.dehon.com}$ 





## **R-507 PHYSICOCHEMICAL PROPERTIES**

Molar mass	g/mol	98.86
Melting point	°C	N/A
Boiling point (under 1.013 bar)	°C	-47.1
Temperature drift under 1.013 bar	K	0
Liquid density at 25°C	kg/m <sup>3</sup>	1049
Vapour density under 1.013 bar	kg/m <sup>3</sup>	5.585
Vapour pressure at: 25°C 50°C	bar	12.88 23.65
Critical temperature Critical pressure Critical density	°C bar kg/m <sup>3</sup>	70.75 37.15 492.5
Latent heat of vaporisation under 1.013 bar at boiling point	kJ/kg	196
Thermal conductivity at 25°C Liquid Vapour under 1.013 bar	W/(m.K)	0.0663 0.0145
Surface tension at 25°C	10 <sup>-3</sup> N/m	4.4
Viscosity at 25°C Liquid Vapour under 1.013 bar	10 <sup>-3</sup> Pa-s	0.125 0.01216
Specific heat at 25°C Liquid Vapour under 1.013 bar	kJ/(kg.K) kJ/(kg.K)	1.536 0.870
Cp/Cv ratio at 25°C under 1.013 bar		1.114
Flammability in air		Non-flammable
ASHRAE classification		A1
Potential effect on ozone	(R-11 = 1)	0

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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