



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 |
| 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 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

Use, implementation and recovery are governed by European regulation no. 2024/573.

It is also important to refer to the regulations in force in each country in Europe and outside Europe.

*Find Safety Data Sheets (SDS) directly on our website www.climalife.com



R-507A PHYSICAL PROPERTIES

| | | |
|--|-----------------------|---------------------|
| Molar mass | g/mol | 98.86 |
| Melting point | °C | N/A |
| Boiling point (at 1.013 bar) | °C | -46.75 |
| 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 50°C | bar bar | 12.83 23.61 |
| Critical temperature | °C | 70.6 |
| Critical pressure | bar | 37.05 |
| Critical density | kg/m ³ | 491 |
| Latent heat of vaporisation at boiling point | kJ/kg | 196.94 |
| Thermal conductivity of liquid at 25°C | W/(m.K) | 0.062 |
| Thermal conductivity of Vapour at 1.013 bar | W/(m.K) | 0.015 |
| Surface tension at 25°C | 10 ⁻³ N/m | 4.33 |
| Viscosity of liquid at 25°C | 10 ⁻³ Pa-s | 0.127 |
| Viscosity of vapour at 1.013 bar | 10 ⁻³ Pa-s | 0.001 |
| Specific heat of Liquid at 25°C | kJ/(kg.K) | 1.539 |
| Specific heat of Vapour at 1.013 bar | kJ/(kg.K) | 0.872 |
| Cp/Cv ratio at 25°C and 1.013 bar | | 1.117 |
| Flammability in air | | Non-flammable |
| Classification NF-EN 378 ASHRAE | | A1 A1 |
| Ozone Depletion Potential | (R-11 = 1) | 0 |
| GWP according to Regulation (EU) 2024/573 (F-Gas III) GWP (AR4 / AR6) | (CO ₂ = 1) | 3985 3985 - 4775 |

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:
climalife.com/contact_us



web