



VIN-FP-556/003

climalife®

R-513A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION *	LIMIT VALUE
Composition - R-1234yf - R-134a	56.0 % (+1% -0.2%) 44.0 % (+1% -0.2%)
Purity	≥ 99.5 % weight
Water content	≤ 10 ppm weight
Total Acidity (HCL)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume

* data producer

MAIN APPLICATIONS

R-513A is an azeotropic blend containing hydrofluorocarbons (HFCs) and hydrofluoro-olefins (HFOs), designed to replace R134a in domestic, commercial and industrial refrigeration applications as well as in air conditioning, liquid cooling and PAC (heat pump) applications. It can be used in direct expansion and flood systems.

OILS

Use a polyol ester (POE) oil.

Consult **Climalife** regarding the viscosity of the oil selected for your system and the most suitable for your application.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet *.

REGULATION

The use and implementation of R-513A are governed by the European Regulation No 517/2014.

The recovery of R-513A is mandatory under the European Regulation No 517/2014 (Refer to regulations enforced in each country.)

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



R-513A

climalife®

R-513A PHYSICAL PROPERTIES

Molar mass	g/mol	108.43
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-29.58
Temperature glide at 1.013 bar	K	0.10
Saturated liquid density at 25°C	kg/m ³	1134
Vapour density at boiling point	kg/m ³	5.677
Vapour pressure at: 25°C 50°C	bar	7.13 13.77
Critical temperature	°C	97.7
Critical pressure	bar	38.55
Critical density	kg/m ³	490
Latent heat of vaporisation at boiling point	kJ/kg	194.77
Thermal conductivity at 25°C Liquid Vapour at 1.013 bar	W/m.K	0.070 0.014
Solubility of water in the fluid at 25°C	% poids	
Viscosity at 25°C Liquid Vapour at 1.013 bar	10 ⁻³ Pa.s	0.167 0.011
Specific heat at 25°C Liquid Vapour at 1.013 bar	kJ/(kg.K)	1.412 0.881
Cp/Cv ratio at 25°C under 1.013 bar		1.107
Flammability in air		Non-flammable
Flash point		None
Classification NF-EN 378 ASHRAE		A1 A1
Ozone Depletion Potential		0
GWP IPCC 4th Assessment / 5th Assessment		631 / 572

Please contact your distributor or **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