



VIN-FP-543/006

R-423A FREON® 39TC

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE	
Composition: R-134a R-227ea R-600a	52.5 % (- 1.0 /+ 1.0) 47.5 % (- 1.0 /+ 1.0)	
Guaranteed purity	≥ 99.5 % weight	
Water content	≤ 10 ppm weight	
Acidity	≤ 1 ppm weight	
Non-condensable content (gas phase)	≤ 1.5 % volume	
High-boiling residues	≤ 0.01 % volume	

MAIN APPLICATIONS

R-423A (FREON® 39TC®) is a near-azeotropic HFC blend intended to replace the R-12 in chiller machines with centrifugal compressors.

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.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet*.

REGULATION

The use and implementation of R-423A are governed by EU Regulation n° 517/2014. The recovery of R-423A 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-423A PHYSICAL PROPERTIES

Molar mass	g/mol	125.96
Melting point	°C	N/A
Boiling point (at 1.013 bar) - bubble	°C	-24.18
Temperature glide at 1.013 bar	K	0.67
Saturated liquid density at 25°C	kg/m ³	1279
Saturated vapour density at boiling point	kg/m ³	6.440
Vapour pressure at: 25°C 50°C Critical temperature Critical pressure Critical density	bar bar °C bar kg/m³	6.10 12.08 99.1 35.63 537
Latent heat of vaporisation at boiling point	kJ/kg	175.73
Thermal conductivity of liquid at 25°C Thermal conductivity of vapour at 1.013 bar	W/(m.K) W/(m.K)	0.071 0.013
Surface tension at 25°C	10 ⁻³ N/m	7.44
Viscosity of liquid at 25°C Viscosity of vapour at 1.013 bar Specific heat of liquid at 25°C Specific heat of vapour at 1.013 bar	10 ⁻³ Pa-s 10 ⁻³ Pa-s kJ/(kg.K) kJ/(kg.K)	0.204 0.012 1.313 0.833
Cp/Cv ratio at 25°C at 1.013 bar	No/(Ng.rt)	1.1
Flammability in air		non-flammable
Flash point	°C	none
Classification NF-EN 378 ASHRAE		A1 A1
Ozone Depletion Potential	(R-11 = 1)	0
GWP According to IPCC-AR4/IPCC-AR5	(CO ₂ = 1)	2280/2274

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.

