



R-449A

GUARANTEED COMMERCIAL SPECIFICATION

STANDARD SPECIFICATION *	LIMIT VALUE
Composition	
- R-32	24.3 % (+0.2% -1%)
- R-125	24.7 % (+1% -0.2%)
- R-1234yf	25.3 % (+0.2% -1%)
- R-134a	25.7 % (+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-449A is a non-azeotropic blend containing refrigerants based on hydrofluorocarbons (HFCs) and hydrofluoro-olefins (HFOs), with low GWP. It has been designed to replace R-404A in medium and low temperature commercial and industrial refrigeration applications. It is suitable for supermarkets and hypermarkets including centralised pack systems and chill and frozen cold stores.

It can be used as a replacement for R-22 but must be in accordance with conversion guidelines.

OILS

Use a polyol ester (POE) oil.

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

PRECAUTIONS OF USE

Refer to the Safety Data Sheet *.

REGULATION

Use, implementation and recovery of **R-449A** 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 the Safety Data Sheet (SDS) directly on our website www.climalife.com


R-449A PHYSICAL PROPERTIES

Molar mass	g/mol	87.21
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-45.72
Temperature glide at 1.013 bar	K	5.72
Saturated liquid density at 25°C	kg/m ³	1097
Vapour density at boiling point	kg/m ³	4.758
Vapour pressure at: 25°C 50°C	bar	12.69 23.41
Critical temperature	°C	83.9
Critical pressure	bar	46.62
Critical density	kg/m ³	480
Latent heat of vaporisation at boiling point	kJ/kg	238.67
Thermal conductivity at 25°C Liquid Vapour at 1.013 bar	W/m.K	0.080 0.014
Surface tension at 25°C	10 ⁻³ N/m	6.59
Viscosity at 25°C Liquid Vapour at 1.013 bar	10 ⁻³ Pa.s	0.139 0.012
Specific heat at 25°C Liquid Vapour at 1.013 bar	kJ/(kg.K)	1.550 0.851
Cp/Cv ratio at 25°C at 1.013 bar		1.139
Flammability in air		Non-flammable
Flash point		None
Classification NF-EN 378 PED		A1 Category 2
Ozone Depletion Potential		0
GWP according to Regulation (EU) 2024/573 (F-Gas III)	(CO ₂ = 1)	1396 1397 / 1504
GWP (AR4 / AR6)		

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.

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