



R-452A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION *	LIMIT VALUE
Composition	
- R-32	11 % (+1.7% -1.7%)
- R-125	59 % (+1.8% -1.8%)
- R-1234yf	30 % (+0.1% -1.0%)
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-452A is a non-azeotropic blend containing hydrofluorocarbons (HFCs and hydrofluoro-olefins (HFOs), designed to replace R-404A in new or existing installations and especially in transport refrigeration.

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

Use, implementation and recovery of **R-452A** 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-452A PHYSICAL PROPERTIES

Molar mass	g/mol	103.51
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	- 46.93
Temperature glide at 1.013 bar	K	3.79
Saturated liquid density at 25°C	kg/m ³	1125
Vapour density at boiling point	kg/m ³	5.7
Vapour pressure at: 25°C 50°C	bar	13.11 24.02
Critical temperature	°C	75.6
Critical pressure	bar	40.67
Critical density	kg/m ³	515
Latent heat of vaporisation at boiling point	kJ/kg	195.75
Thermal conductivity at 25°C Liquid Vapour at 1.013 bar	W/m.K	0.067 0.014
Surface tension at 25°C	10 ⁻³ N/m	5.10
Viscosity at 25°C Liquid Vapour at 1.013 bar	10 ⁻³ Pa.s	0.136 0.013
Specific heat at 25°C Liquid Vapour at 1.013 bar	kJ/(kg.K)	1.471 0.835
Cp/Cv ratio at 25°C under 1.013 bar		1.117
Flammability in air		Non-flammable
Flash point		None
Classification NF-EN 378 PE(S)R		A1 Category 2
Ozone Depletion Potential		0
GWP according to Regulation (EU) 2024/573 (F-Gas III) GWP (AR4 / AR6)	(CO ₂ = 1)	2139 2140 / 2292

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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