



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
Chlorine ion test (silver nitrate test)	Negative
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 refrigerants from the hydrofluoro-olefin (HFO) family, 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

The use and implementation of R-452A are governed by the European Regulation No 517/2014 .

The recovery of R-452A 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-452A

climalife®

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	75.05
Critical pressure	bar	40.15
Critical density	kg/m ³	507
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
Solubility of water in the fluid at 25°C	% weight	/
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 ASHRAE		Ongoing A1
Ozone Depletion Potential		0
GWP 4th Assessment 5th Assessment		2140 1945

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