



Refrigerants

R-454A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION *	LIMIT VALUE
Composition	
- R-32	35 % (+1% -1%)
- R-1234yf	65 % (+1% -1%)
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-454A is a non-azeotropic blend containing hydrofluorocarbons (HFCs) and hydrofluoro-olefins (HFOs) with a low GWP. It is primarily intended for refrigeration applications in refrigerated transport. It can also be used in new direct expansion commercial and industrial refrigeration installations for condensing units, cold rooms and self-contained systems that were previously using R-404A.

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-454A** 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



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R-454A PHYSICAL PROPERTIES

Molar mass	g/mol	80.5
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-47.85
Temperature glide at 1.013 bar	K	5.69
Saturated liquid density at 25°C	kg/m³	1021
Vapour density at boiling point	kg/m³	4.434
Vapour pressure at:		
25°C	bar	13.44
50°C		24.56
Critical temperature	°C	81.72
Critical pressure	bar	46.27
Critical density	kg/m³	456
Latent heat of vaporisation at boiling point	kJ/kg	251.34
Thermal conductivity at 25°C		
Liquid	W/m.K	0.84
Vapour at 1.013 bar		0.013
Surface tension at 25°C	10⁻³N/m	5.67
Viscosity at 25°C		
Liquid	10⁻³ Pa.s	0.122
Vapour at 1.013 bar		0.012
Specific heat at 25°C		
Liquid	kJ/(kg.K)	1.622
Vapour at 1.013 bar		0.884
Cp/Cv ratio at 25°C under 1.013 bar		1.145
Flammability in air		Mildly flammable
Flash point		0
Classification	NF-EN 378 PE(S)R	A2L Category 1
Ozone Depletion Potential		0
GWP According to regulation (EU) 2024/573 (F-GAS III)	(CO ₂ = 1)	237
GWP (AR4 / AR6)		239 / 270

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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