



Refrigerants

R-407A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION*	LIMIT VALUE	
Composition		
- R-32	20 % (± 2 %)	
- R-125	40 % (± 2 %)	
- R-134a	40 % (± 2 %)	
Purity	≥ 99.5 % weight	
Water content	≤ 10 ppm weight	
Total Acidity (HCL)	≤ 1 ppm weight	
Non-condensable content (gas phase)	≤ 1.5 % volume	
High-boiling residues	≤ 0.01 % volume	

MAIN APPLICATIONS

R-407A is a "non azeotropic" HFC blend. It can be used in medium and low temperature commercial refrigeration applications where R-22 or R-404A may have traditionally been used. It can be replaced by R-448A.

OILS

Use a polyol ester (POE) oil.

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

Use, implementation and recovery of R-407A 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-407A PHYSICAL PROPERTIES

Refrigerant

Molar mass	g/mol	90.11
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-45.01
Temperature Glide at 1.013 bar	K	6.41
Saturated liquid density at 25°C	kg/m³	1145
Vapour density at boiling point	kg/m³	4.881
Vapour pressure at: 25°C	bar	12.53
50°C		23.24
Critical temperature	°C	82.3
Critical pressure	bar	45.15
Critical density	kg/m³	499
Latent heat of vaporisation at boiling point	kJ/kg	235.57
Thermal conductivity of liquid at 25°C	W/m.K	0.079
Thermal conductivity of vapour at 1.013 bar	W/m.K	0.014
Surface tension at 25°C	10 ⁻³ N/m	6.38
Viscosity of liquid at 25°C	10 ⁻³ Pa.s	0.151
Viscosity of vapour at 1.013 bar	10 ⁻³ Pa.s	0.013
Specific heat of liquid at 25°C	kJ/(kg.K)	1.520
Specific heat of vapour at 1.013 bar	kJ/(kg.K)	0.829
Cp/Cv ratio at 25°C at 1.013 bar		1.138
Flammability in air		Non-flammable
Flash point	°C	None
Classification NF-EN 378 / ASHRAE PE(S)R		A1 Category 2
Ozone Depletion Potential	(R-11 = 1)	0
GWP according to Regulation (EU) 2024/573 (F-Gas III)	(CO = 1)	2107
GWP (AR4 / AR6)	$(CO_2 = 1)$	2107 / 2262

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.

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