



Refrigerants

R-410A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE	
Composition:		
R-32	50 % (+0.5% -1.5%)	
R-125	50 % (+1.5% -0.5%)	
Guaranteed purity	≥ 99.5 % weight	
Water content	≤ 10 ppm weight	
Acidity (HCI)	≤ 1 ppm weight	
Non-condensable content (gas phase)	≤ 1.5 % volume	
High-boiling residues	≤ 0.01 % volume	

MAIN APPLICATIONS

R-410A is a near azeotropic HFC blend. It is mainly used in air conditioning and industrial refrigeration applications.

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 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 Safety Data Sheets (SDS) directly on our website www.climalife.com





Refrigerants

R-410A PHYSICAL PROPERTIES

Molar mass	g/mol	72.59
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-51.45
Temperature glide at 1.013 bar	K	0.08
Saturated liquid density at 25°C	kg/m ³	1059
Saturated vapour density at boiling point	kg/m ³	4.173
Vapour pressure at: 25°C 50°C Critical temperature Critical pressure	bar bar °C bar	16.57 30.71 71.3 49.01
Critical density	kg/m ³	459
Latent heat of vaporisation at boiling point	kJ/kg	272.97
Thermal conductivity of liquid at 25°C Thermal conductivity vapour at 1.013 bar	W/(m.K) W/(m.K)	0.089 0.013
Surface tension at 25°C	10 ⁻³ N/m	5.32
Viscosity of liquid at 25°C Viscosity of vapour at 1.013 bar Specific heat of liquid at 25°C	10 ⁻³ Pa-s 10 ⁻³ Pa-s kJ/(kg.K)	0.118 0.013 1.708
Specific heat of vapour at 1.013 bar	kJ/(kg.K)	0.823
Cp/Cv ratio at 25°C at 1.013 bar		1.176
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) GWP (AR4 / AR6)	(CO ₂ = 1)	2088 2088 / 2256

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.

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.



