



Refrigerants

R-470A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION *	LIMIT VALUE	
Composition		
- R-227ea	3.0 % (±0.5%)	
- R-134a	7.0 % (±0.5%)	
- R-744 (CO ₂)	10.0 % (±1.0%)	
- R-32	17.0 % (±1.0%)	
- R-125	19.0 % (±1.0%)	
- R-1234ze	44.0 % (±2.0%)	
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-470A is a non-flammable mixture of hydrofluorocarbon (HFC) and hydrofluoro-olefin (HFO).

It is offered as a replacement for R-410A in small capacity split air conditioning systems.

OILS

Use a polyol ester (POE) oil. Consult **Climalife** to select the right oil for the refrigerant.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet*.

REGULATION

Use, implementation and recovery of **R-470A** 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-470A PHYSICAL PROPERTIES

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Molar mass	g/mol	84.4
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	- 62.66
Temperature glide at 1.013 bar	K	27.04
Saturated liquid density at 25°C	kg/m³	1101
Vapour density at boiling point	kg/m³	4.477
Vapour pressure at:		
25°C	bar	18.43
50°C		30.97
Critical temperature	°C	88.70
Critical pressure	bar	55.92
Critical density	kg/m³	481
Latent heat of vaporisation at boiling point	kJ/kg	268.45
Thermal conductivity at 25°C		
Liquid	W/m.K	0.085
Vapour at 1.013 bar	VV / III.K	0.014
Surface tension at 25°C	10 ⁻³ N/m	6.23
Viscosity at 25°C		
Liquid	10 ⁻³ Pa.s	0.139
Vapour at 1.013 bar		0.013
Specific heat at 25°C		
Liquid	kJ/(kg.K)	1.584
Vapour at 1.013 bar		0.854
Cp/Cv ratio at 25°C under 1.013 bar		1.141
Flammability in air		Non flammable
Flash point		None
Classification NF-EN 378		A1
PE(S)R		Category 2
Ozone Depletion Potential		0
GWP according to Regulation (EU) 2024/573 (F-Gas III)		977
GWP (AR4 / AR6)		980 / 1057

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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