



Refrigerants

# R-437A (FREON® MO49Plus)

#### **GUARANTEED COMMERCIAL SPECIFICATIONS**

STANDARD SPECIFICATIONS	LIMIT VALUE		
Composition			
- R-125	19.5 % (+ 0.1% - 0.2%)		
- R-134a	78.5 % (+ 0.1% - 0.2%)		
- R-600	1.4 % (+ 0.5% - 1.8%)		
- R-601	0.6 % (+0.5% - 0.7%)		
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-437A (FREON® MO49+) is a non-azeotropic HFC blend, which was used to replace R-12(CFC), HCFC blends R-401A, R-409A and R-413A (HFC) in domestic refrigeration, commercial and industrial. It is used as a direct replacement in existing installations; transport refrigeration, cold rooms, refrigerated wine cellars, domestic refrigerators and car air conditioning.

Do not use in systems with a flooded evaporator or centrifugal chillers.

#### **OILS**

Use a mineral oil (MO), alkylbenzene (AB) or polyolester (POE). For automobile air conditioning, use a poly alkylene glycol (PAG).

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-437A 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





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## **R-437A PHYSICAL PROPERTIES**

Molar Mass	g/mol	103.71
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-32.33
Temperature glide at 1.013 bar	K	4.27
Saturated liquid density at 25°C	kg/m³	1178
Saturated vapour density at boiling point	kg/m³	5.382
Vapour pressure at :		
25°C	bar	7.94
50°C	bar	15.26
Critical Temperature	°C	96.3
Critical Pressure	bar	40.87
Critical Density	kg/m³	512
Latent heat of vaporisation at boiling point	kJ/kg	213.13
Thermal Conductivity of liquid at 25°C	W/(m.K)	0.077
Thermal Conductivity of Vapour at 1.013 bar	W/(m.K)	0.014
Surface tension at 25°C	10 <sup>-3</sup> N/m	7.54
Viscosity of liquid at 25°C		0.183
Viscosity of Vapour at 1.013 bar	10 <sup>-3</sup> Pa.s	0.012
Specific heat of liquid at 25°C	kJ/(kg.K)	1.436
Specific heat of vapour at 1.013 bar	kJ/(kg.K)	0.858
Cp/Cv ratio at 25°C and 1.013 bar		1.116
Flammability in air		Non-flammable
Flash point		None
Classification		
NF-EN 378		A1
ASHRAE	(D. 44. 4)	A1
Ozone Depletion Potential	(R-11=1)	0
GWP according to Regulation (EU) 2024/573 (F-Gas III)	(CO <sub>2</sub> =1)	1805
GWP (AR4 / AR6)		1805/1930

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.



