



# climalife®

Ref. : FF.84 /01.17/V4/ EN

## R-437A (FREON® MO49Plus)

### GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Composition	
- R-601	0.6 % (+ 0.1% - 0.2%)
- R-600	1.4 % (+ 0.1% - 0.2%)
- R-125	19.5 % (+ 0.5% - 1.8%)
- R-134a	78.5 % (+1.5% - 0.7%)
Purity	≥ 99.5% weight
Water content	≤ 10 ppm weight
Chloride ionTest	Negative
Acidity (HCl)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume
High boiling residues	≤ 0.01 % volume

### MAIN APPLICATIONS

R-437A (FREON® MO49Plus) is a zeotropic HFC blend, which can 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

The use and implementation of R-437A are governed by EU Regulation n° 517/2014.

The recovery of R-437A is mandatory under EU Regulation n° 517/2014.

(Refer to regulations enforced in each country)

\* Find the Safety Data Sheet (SDS) directly on our website [www.climalife.dehon.com](http://www.climalife.dehon.com)



R-437A

climalife®

## R-437A PHYSICAL PROPERTIES

Molar Mass	g/mol	103.7
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-32.33
Temperature glide at 1.013 bar	K	4.28
Saturated liquid density at 25°C	kg/m <sup>3</sup>	1178
Saturated vapour density at boiling point	kg/m <sup>3</sup>	5.382
Vapour pressure at : 25°C	bar	7.94
50°C	bar	15.26
Critical Temperature	°C	96
Critical Pressure	bar	40.96
Critical Density	kg/m <sup>3</sup>	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	7.56
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		1.115
Flammability in air		Non-flammable
Flash point		None
Classification NF-EN 378		L1
Ozone Depletion Potential	(R-11=1)	0
GWP	(CO <sub>2</sub> =1)	1805

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.

For more information visit our website :

[http://www.climalife.dehon.com/contact\\_us](http://www.climalife.dehon.com/contact_us)



Copyright© 2017 - dehon service SA – All rights reserved.