



VIN-FP-538/004

**climalife**<sup>®</sup>

# 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

The use and implementation of R-407A are governed by EU Regulation n° 517/2014.

The recovery of R-407A 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-407A PHYSICAL PROPERTIES**

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/m <sup>3</sup>	1145
Vapour density at boiling point	kg/m <sup>3</sup>	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/m <sup>3</sup>	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 <sup>-3</sup> N/m	6.38
Viscosity of liquid at 25°C	10 <sup>-3</sup> Pa.s	0.151
Viscosity of vapour at 1.013 bar	10 <sup>-3</sup> 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		A1
ASHRAE		A1
Ozone Depletion Potential	(R-11 = 1)	0
GWP		
According to IPCC-AR4/IPCC-AR5	(CO <sub>2</sub> = 1)	2107/1923

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, please visit our website:



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