



VIN-FP-544/007

R-427A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Composition:	
R-32	15 % (± 2.0 %)
R-125	25 % (± 2.0 %)
R-143a	10 % (± 2.0 %)
R134a	50 % (± 2.0 %)
Guaranteed purity	≥ 99.5 % weight
Water content	≤ 10 ppm weight
Acidity (HCl)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume
High-boiling residues	≤ 0.01 % volume

MAIN APPLICATIONS

R-427A (Forane® FX100) is a non-azeotropic HFC blend intended to replace R-22 (HCFC). It can be used in direct expansion refrigeration and air conditioning applications.

OILS

Use a polyol ester (POE) oil.

For use in conversion, a residual variable level of mineral oil (MN), or original alkylbenzene (AB) is acceptable as a function of the running speed.

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-427A are governed by EU Regulation n° 517/2014.

The recovery of R-427A 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



R-427A

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R-427A PHYSICAL PROPERTIES

Molar mass	g/mol	90.44
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-42.97
Temperature glide at 1.013 bar	K	6.76
Saturated liquid density at 25°C	kg/m ³	1129
Saturated vapour density at boiling point	kg/m ³	4.85
Vapour pressure at: 25°C	bar	11.43
50°C	bar	21.25
Critical temperature	°C	85.3
Critical pressure	bar	43.92
Critical density	kg/m ³	490
Latent heat of vaporisation at boiling point	kJ/kg	236.52
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 ⁻³ N/m	6.61
Viscosity of liquid at 25°C	10 ⁻³ Pa.s	0.154
Viscosity of vapour under 1.013 bar	10 ⁻³ Pa.s	0.012
Specific heat capacity of liquid at 25°C	kJ/(kg.K)	1.517
Specific heat of vapour at 1.013 bar	kJ/(kg.K)	0.847
Cp/Cv ratio at 25°C at 1.013 bar		1.135
Flammability in air		Non-flammable
Flash point	°C	None
Classification NF-EN 378		A1
ASHRAE		A1
Ozone Depletion Potential	(R-11 = 1)	0
GWP	(CO ₂ = 1)	2138/2024
According to IPCC-AR4/IPCC-AR5		

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

