



R-471A

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION *	LIMIT VALUE
Composition	
- R-1234ze(E)	78.7 % (+0.4 % -1.5 %)
- R-227ea	4.3 % (+1.5 % -0.4 %)
- R-1336mzz(E)	17.0 % (+1.5 % -0.4 %)
Purity	≥ 99.5 % weight
Water content	≤ 10 ppm weight
Total Acidity (HCL)	≤ 1 ppm weight
Non condensable content (gas phase)	≤ 1.5 % volume

* manufacturer data

MAIN APPLICATIONS

R-471A is a non-flammable blend of hydrofluorocarbon (HFC) and hydrofluoro-olefin (HFO). It is suitable for commercial refrigeration applications in supermarkets, cold stores, industrial processes and convenience stores.

It is used in medium temperature refrigeration systems, such as direct expansion refrigeration units to supply cabinets and cold rooms.

OILS

Use a polyol ester (POE) oil.

Consult **Climalife** to select the right oil for your system and application.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet†.

REGULATION

The use and implementation of R-471A are governed by the European Regulation No 517/2014.

The recovery of R-471A is mandatory under the European Regulation No 517/2014.

(Refer to regulations enforced in each country.)

†Find the Safety Data Sheets (SDS) directly on our website www.climalife.dehon.com.


PHYSICAL PROPERTIES OF R-471A

Molar mass	g/mol	122,1
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-16,87
Temperature glide at 1.013 bar	K	3,29
Saturated liquid density at 25°C	kg/m ³	1195
Vapour density at boiling point	kg/m ³	5,981
Vapour pressure at: 25°C 50°C	bar	4,59 9,22
Critical temperature	°C	112,36
Critical pressure	bar	35,34
Critical density	kg/m ³	484
Latent heat of vaporisation at boiling point	kJ/kg	185,75
Thermal conductivity at 25°C Liquid Vapour at 1.013 bar	W/m.K	0,074 0,014
Surface tension at 25°C	10 ⁻³ N/m	8,90
Viscosity at 25°C Liquid Vapour at 1.013 bar	10 ⁻³ Pa.s	0,202 0,011
Specific heat at 25°C Liquid Vapour at 1.013 bar	kJ/(kg.K)	1,351 0,876
Cp/Cv ratio at 25°C under 1.013 bar		1,097
Flammability in air		Non flammable
Flash point		None
Classification	ASHRAE NF-EN 378	A1 A1
Ozone Depletion Potential		0
GWP	IPCC-AR4 IPCC-AR5	148 146

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.

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.



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