



R-1234yf

2,3,3,3-tetrafluoroprop-1-ene

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION*	LIMIT VALUE
Purity	≥ 99.5 % weight
Water content	≤ 20 ppm weight
Chlorine ion test (silver nitrate test)	Negative
Total Acidity (HCL)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume

* (data producer)

MAIN APPLICATIONS

R-1234yf is a single component HFO. This product has a very low GWP figure and is suitable for automotive air conditioning applications. It may also be suitable as a R-134a replacement in other applications.

OILS

Use a poly alkylene glycol (PAG) oil for automotive air conditioning applications. For all other applications use a polyol ester (POE) oil.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet*.

REGULATION

Use, implementation and recovery of R-1234yf 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 the Safety Data Sheet (SDS) directly on our website www.climalife.com.


PHYSIO-CHEMICAL PROPERTIES OF R-1234YF

Molar mass	g/mol	114.04
Boiling point (at 1.013 bar)	°C	-29.49
Saturated fluid density at 25°C	kg/m ³	1092
Vapour density at boiling point	kg/m ³	5.980
Vapour pressure at:		
25°C	bar	6.83
50°C	bar	13.02
Critical temperature	°C	94.70
Critical pressure	bar	33.82
Critical density	kg/m ³	476
Latent heat of vaporisation at boiling point	kJ/kg	180.25
Thermal conductivity of liquid at 25°C	W/m.K	0.064
Thermal conductivity of vapour at 1.013 bar	W/m.K	0.014
Surface tension at 25°C	10 ⁻³ N/m	6.17
Viscosity of liquid at 25°C	10 ⁻³ Pa.s	0.154
Viscosity of vapour at 1.013 bar	10 ⁻³ Pa.s	0.011
Specific heat of liquid at 25°C	kJ/(kg.K)	1.392
Specific heat of vapour at 1.013 bar	kJ/(kg.K)	0.905
Cp/Cv ratio at 25°C under 1.013 bar		1.099
Flammability in air		Mildly flammable
Flashing point		None
Classification		
- NF-EN 378		A2L
- PED		Category 1
Ozone Depletion Potential		0
GWP according to Regulation (EU) 2024/573 (F-Gas III)	(CO ₂ = 1)	0.501
GWP (AR4 / AR6)		4 / 0.501

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.

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