R-236fa

1,1,1,3,3,3 – HEXAFLUOROPROPANE CF_3-CH_2-CF_3

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Purity	≥ 99.5 % weight
Water content	≤ 10 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume
High-boiling residues	≤ 0.01 % volume
Total acidity (HCl)	≤ 1 ppm weight

MAIN APPLICATIONS

R-236fa is a hydrofluorocarbon (HFC) used mainly in air-conditioning systems replacing R-114 and R-124, such as marine water coolers.

It can also be used for rolling bridge / crane air-conditioning.

OILS

Use a polyol ester (POE) oil.

Check with **Marsis** 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*.

* For the R236fa Safety Data Sheet (SDS), please contact Marsis Technical Support: info@marsisltd.com*

R-236FA PHYSICAL PROPERTIES

Molar mass	g/mol	152.04
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-1.49
Saturated liquid density at 25°C	kg/m^3	1360
Saturated vapour density at boiling point	kg/m^3	7.151
Vapour pressure at: 25°C 50°C	 bar bar	 2.72 5.83
Critical temperature Critical pressure Critical density	°C bar kg/m^3	124.90 32.0 551
Latent heat of vaporisation at boiling point	KJ/kg	159.39
Thermal conductivity of liquid at 25°C Thermal conductivity of vapour at 1.013 bar	W/(m.K) W/(m.K)	0.073 0.013
Surface tension at 25°C	10^{-3} N/m	9.59
Viscosity of liquid at 25°C Viscosity of vapour at 1.013 bar	10^{-3} Pa-s 10^{-3} Pa-s	0.285 0.011
Specific heat of liquid at 25°C Specific heat of vapour at 1.013 bar	kJ/(kg.K) kJ/(kg.K)	1.238 0.838
Cp/Cv ratio at 25°C at 1.013 bar		1.084
Flammability in air		non-flammable
Flash point	°C	None
Classification NF-EN 378 / ASHRAE PE(S)R		A1 Category 2
Potential effect on ozone	(R-11 = 1)	0
GWP according to Regulation (EU) 2024/573 (F-Gas III) GWP (AR4 / AR6)	(CO2 = 1)	9810 9810 / 8690

For more information about R236fa, please contact our Marsis Sales Department: marsisltd.com