



FREON[®] MO89

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS LIMIT VALUE	STANDARD SPECIFICATIONS LIMIT VALUE
Composition	Composition
R-125	R-125
R-218	R-218
R-290	R-290
86% (-1.5% +1.5%)	86% (-1.5% +1.5%)
9 % (-1.0% +1.0%)	9 % (-1.0% +1.0%)

MAIN APPLICATIONS

FREON[®] MO89 is a HFC type zeotropic mixture, intended for "drop-in" replacement of R-13B1, used in very low temperatures direct expansion setups.

It can also be used in new setups.

OILS

Use an alkylbenzene (AB) or 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

Use, implementation and recovery 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 Safety Data Sheets (SDS) directly on our website www.climalife.com


PHYSICO-CHEMICAL PROPERTIES OF FREON® MO89

Molar mass	g/mol	113.9
Melting point	°C	N/A
Boiling point (under 1.013 bar)	°C	-53.4
Temperature drift under 1.013 bar	K	3.06
Saturated fluid density at 25°C	kg/m ³	1082
Saturated vapour density at boiling point	kg/m ³	6.507
Vapour tension at : 25°C 50°C	bar	15.27 27.51
Critical temperature	°C	64.18
Critical pressure	bar	37.34
Critical density	kg/m ³	534.3
Latent heat of vaporisation at boiling point	kJ/kg	170.42
Thermal conductivity at 25°C Liquid Vapour under 1.013 bar	W/(m.K)	0.059 0.016
Surface tension at 25°C	10 ⁻³ N/m	3.71
Water solubility in the fluid at 25°C	% weight	
Viscosity at 25°C Liquid Vapour under 1.013 bar	10 ⁻³ Pa.s	0.121 0.013
Specific heat at 25°C Liquid Vapour under 1.013 bar	kJ/(kg.K)	1.501 0.840
Ratio Cp/Cv at 25°C under 1.013 bar		1.103
Flammability in air		Non-flammable
Flashing point		None
NF-EN 378 Classification		L1
Ozone Depletion Potential	(R-11=1)	0
GWP according to Regulation (EU) 2024/573 (F-Gas III)	(CO ₂ = 1)	3811
GWP (AR4 / AR6)		3770 / 4015

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.

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