



R-508 B

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Composition R-23 R-116	46 % (± 1 %) 54 % (± 1 %)
Guaranteed purity	≥ 99.5 % volume
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-508B is a HFC azeotropic blend intended for very low temperature refrigeration applications. It has also been used to replace R-503.

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*.

* You can request a Safety Data Sheet (SDS) from Marsis. marsisltd.com

R-508B PHYSICAL PROPERTIES

Molar mass	g/mol	95.39
Temperature glide	K	0.44
Boiling point (at 1.013 bar)	°C	-87.60
Saturating vapour density at normal boiling point	kg/m ³	6.548
Critical temperature	°C	11.20
Critical pressure	bar	37.72
Critical density	kg/m ³	568
Latent heat of vaporisation at 1.013 bar	kJ/kg	165.36
Thermal conductivity of liquid at -30°C Thermal conductivity of vapour at 1.013 bar	W/(m.K) W/(m.K)	0.013
Surface tension at 25°C	10 ⁻³ N/m	N/A
Viscosity at 25°C Liquid Vapour under 1.013 bar	10 ⁻³ Pa-s	N/A 0.015
Mass heat at 25°C Liquid Vapour under 1.013 bar	kJ/(kg.K)	N/A 0.757
Cp/Cv ratio at 25°C at 1.013 bar		1.136
Flammability in the air		Non flammable
Classification NF-EN 378 / ASHRAE PE(S)R		A1 Category 2
Ozone Depletion Potential	(R-11 = 1)	0
GWP according to Regulation (EU) 2024/573 (F-Gas III)	(CO ₂ = 1)	13504
GWP (AR4 / AR6)		13396 / 13412

For more information, please contact our Marsis sales department. In addition.