



Refrigerants

## R-508 B

### GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Composition R-23 R-116	46 % ( $\pm 1\%$ ) 54 % ( $\pm 1\%$ )
Guaranteed purity	$\geq 99.5\%$ volume
Water content	$\leq 10$ ppm weight
Acidity (HCl)	$\leq 1$ ppm weight
Non-condensable content (gas phase)	$\leq 1.5\%$ volume
High-boiling residues	$\leq 0.01\%$ 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 **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 of R-508B 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](http://www.climalife.com)



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## 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 <sup>3</sup>	6.548
Critical temperature	°C	11.20
Critical pressure	bar	37.72
Critical density	kg/m <sup>3</sup>	568
Latent heat of vaporisation at 1.013 bar	kJ/kg	165.36
Thermal conductivity of liquid at -30°C	W/(m.K)	
Thermal conductivity of vapour at 1.013 bar	W/(m.K)	0.013
Surface tension at 25°C	10 <sup>-3</sup> N/m	N/A
Viscosity at 25°C		
Liquid		N/A
Vapour under 1.013 bar	10 <sup>-3</sup> Pa·s	0.015
Mass heat at 25°C		
Liquid	kJ/(kg.K)	N/A
Vapour under 1.013 bar		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		A1
PE(S)R		Category 2
Ozone Depletion Potential	(R-11 = 1)	0
GWP according to Regulation (EU) 2024/573 (F-Gas III)	(CO <sub>2</sub> = 1)	13504
GWP (AR4 / AR6)		13396 / 13412

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.

*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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