



VIN-FP-581/001

# R-515B

#### **GUARANTEED COMMERCIAL SPECIFICATION**

STANDARD SPECIFICATION *	LIMIT VALUE
Composition - R-1234ze - R-227ea	91.1 % (+0.1% -2 %) 8.9 % (+2% -0.1%)
Purity	≥ 99.5 % weight
Water content	≤ 10 ppm weight
Total acidity (HCL)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume

<sup>\*</sup> data producer

#### **MAIN APPLICATIONS**

R-515B is a non-flammable azeotropic blend of a Hydro-fluoro-olefin (HFO) and a Hydro-fluoro-carbon (HFC). It is intended for use in chillers, heat pumps and air conditioning applications, including high ambient temperature applications. It is suitable for both direct expansion and flooded systems.

## **OILS**

Use a polyol ester (POE) oil.

Consult **Climalife** to select the most suitable oil for the refrigerant in use.

#### PRECAUTIONS OF USE

Refer to the Safety Data Sheet \*\*.

## **REGULATION**

The use and implementation of R-515B is governed by European Regulation n° 517/2014. The recovery of R-515B is mandatory under the European Regulation n° 517/2014. (Refer to regulations enforced in each country)

\*\*Find the Safety Data Sheets (SDS) directly on our website www.climalife.dehon.com





## **R-515B: PHYSICAL PROPERTIES**

Molar mass	g/mol	117.5
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-18.80
Temperature glide at 1.013 bar	K	0
Saturated liquid density at 25°C	kg/m³	1181
Vapour density at boiling point	kg/m³	5.875
Vapour pressure at:		
25°C	bar	4.95
50°C		9.91
Critical temperature	°C	108.88
Critical pressure	bar	35.84
Critical density	kg/m <sup>3</sup>	492
Latent heat of vaporisation at boiling point	kJ/kg	189.97
Thermal conductivity at 25°C		
Liquid	W/m.K	0.073
Vapour at 1.013 bar		0.014
Surface tension at 25°C	10- <sup>3</sup> N/m	8.76
Viscosity at 25°C		
Liquid	10 <sup>-3</sup> Pa.s	0.193
Vapour at 1.013 bar		0.012
Specific heat at 25°C		
Liquid	kJ/(kg.K)	1.367
Vapour at 1.013 bar		0.882
Cp/Cv ratio at 25°C at 1.013 bar		1.099
Flammability in air		Non-flammable
Flash point		None
Classification	ASHRAE	A1
	NF-EN 378	A1
Ozone Depletion Potential		0
GWP	IPCC-AR4	293
	IPCC-AR5	299

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.

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.

