



## R-515B

### GUARANTEED COMMERCIAL SPECIFICATION

| STANDARD SPECIFICATION *               | LIMIT VALUE                              |
|--|--|
| Composition<br>- R-1234ze<br>- R-227ea | 91.1 % (+0.1% -2 %)<br>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                           |

\* 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

Use, implementation and recovery of **R-515B** 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 Sheets (SDS) directly on our website [www.climalife.com](http://www.climalife.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/m <sup>3</sup>     | 1181           |
| Vapour density at boiling point                               | kg/m <sup>3</sup>     | 5.875          |
| Vapour pressure at:<br>25°C<br>50°C                           | bar                   | 4.95<br>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<br>Liquid<br>Vapour at 1.013 bar | W/m.K                 | 0.073<br>0.014 |
| Surface tension at 25°C                                       | 10 <sup>-3</sup> N/m  | 8.76           |
| Viscosity at 25°C<br>Liquid<br>Vapour at 1.013 bar            | 10 <sup>-3</sup> Pa.s | 0.193<br>0.012 |
| Specific heat at 25°C<br>Liquid<br>Vapour at 1.013 bar        | kJ/(kg.K)             | 1.367<br>0.882 |
| Cp/Cv ratio at 25°C at 1.013 bar                              |                       | 1.099          |
| Flammability in air   |                       | Non-flammable  |
| Flash point   |                       | None           |
| Classification NF-EN 378 / ASHRAE<br>DESP                     |                       | A1<br>Group 2  |
| Ozone Depletion Potential                                     |                       | 0              |
| GWP according to Regulation (EU) 2024/573 (F-Gas III)         | CO2 = 1               | 288<br>293/322 |
| GWP (AR4 / AR6)   |                       |                |

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.*



For more information, please visit our website:  
[climalife.com/contact\\_us](https://climalife.com/contact_us)



web