



VIN-FP-601/001

R-454B

GUARANTEED COMMERCIAL SPECIFICATIONS

| STANDARD SPECIFICATION * | LIMIT VALUE |
|-------------------------------------|----------------------|
| Composition | |
| - R-32 | 68.9 % (+1% -1%) |
| - R-1234yf | 31.1 % (+1% -1%) |
| Purity | ≥99.5% weight |
| Water content | \leq 10 ppm weight |
| Total acidity (HCL) | ≤ 1 ppm weight |
| Non-condensable content (gas phase) | ≤ 1.5 % volume |
| the producer | |

*data producer

MAIN APPLICATIONS

R-454B is a non-azeotropic blend of hydrofluorocarbon (HFC) and low GWP hydrofluoroolefin (HFO), designed to replace R-410A in new air conditioning installations.

It is recommended for use in small, positive displacement, residential and commercial equipment, direct expansion (DX) chillers and air conditioning systems, window air conditioning, heat pumps, multiblock and ducted air conditioners.

OILS

Use a polyol ester (POE) oil. Consult **Climalife** regarding the viscosity of the oil selected for your system and the most suitable for your application.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet*.

REGULATION

The use and implementation of R-454B are governed by the European Regulation n° 517/2014.

The recovery of R-454B 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-454B PHYSICAL PROPERTIES

| Molar Mass | g/mol | 62.61 |
|--|-----------------------|------------------|
| Melting point | °C | N/A |
| Boiling point (under 1.013 bar) | °C | -50.50 |
| Temperature glide under 1.013 bar | К | 1.5 |
| Saturated liquid density at 25°C | kg/m ³ | 985 |
| Vapour density at boiling point | kg/m ³ | 3.565 |
| Vapour pressure at: | | |
| 25°C | bar | 15.71 |
| 50°C | | 29.02 |
| Critical temperature | °C | 78.10 |
| Critical pressure | bar | 52.67 |
| Critical density | kg/m ³ | 443 |
| Latent heat of vaporisation at boiling point | kJ/kg | 316.29 |
| Thermal conductivity at 25°C | | |
| Liquid | W/m.K | 0.105 |
| Vapour at 1.013 bar | | 0.013 |
| Surface tension at 25°C | 10 ⁻³ N/m | 6.11 |
| Viscosity at 25°C | | |
| Liquid | 10 ⁻³ Pa.s | 0.115 |
| Vapour at 1.013 bar | | 0.013 |
| Specific heat at 25°C | | |
| Liquid | kJ/(kg. K) | 1.799 |
| Vapour at 1.013 bar | | 0.865 |
| Cp/Cv ratio at 25°C under 1.013 bar | | 1.197 |
| Flammability in air | | Mildly flammable |
| Flash point | | None |
| Classification NF-EN 378 | | A2L |
| ASHRAE | | 0 |
| Ozone Depletion Potential | | 0 |
| GWP | | |
| IPCC-AR4 | | 466 |
| IPCC-AR5 | | 466 |

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, visit our website:

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