



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	≤ 10 ppm weight
Total acidity (HCL)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume

^{*}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 ${\it www.climalife.dehon.com}$





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	K	1.5
Saturated liquid density at 25°C	kg/m³	985
Vapour density at boiling point	kg/m³	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/m³	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	VV/III.K	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		100
IPCC-AR4 IPCC-AR5		466 466
II OC-AND		400

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.

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