



## R-455A

### GUARANTEED COMMERCIAL SPECIFICATION

STANDARD SPECIFICATION *	LIMIT VALUE
Composition	
- R-1234yf	75.5 % (+2.0% - 2.0%)
- R-32	21.5 % (+2.0% - 2.0%)
- R-744	3 % (+2.0% - 2.0%)
Purity	99.5 % weight
Water content	≤ 10 ppm weight
Chlorine ion test (silver nitrate test)	Negative
Total Acidity (HCL)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume

\* data producer

### MAIN APPLICATIONS

R-455A is a mildly flammable, non-azeotropic blend designed to serve as an alternative for low, medium and high temperature applications in new systems and has a GWP <150. Its thermodynamic performance allows it to be used as a replacement for R-22 and R-404A in low and medium temperature refrigeration.

### OILS

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

### PRECAUTIONS OF USE

Refer to the Safety Data Sheet \*.

### REGULATION

The use and implementation of R-455A are governed by the European Regulation No 517/2014.

The recovery of R-455A is mandatory under the European Regulation No 517/2014.  
(Refer to regulations enforced in each country.)

\*Find the Safety Data Sheets (SDS) directly on our website [www.climalife.dehon.com](http://www.climalife.dehon.com)



R-455A

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### R-455A PHYSICAL PROPERTIES

Molar mass	g/mol	87.5
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-52.03
Temperature glide at 1.013 bar	K	12.85
Saturated liquid density at 25°C	kg/m <sup>3</sup>	1033
Vapour density at boiling point	kg/m <sup>3</sup>	4.747
Vapour pressure at: 25°C 50°C	bar	13.85 24.43
Critical temperature	°C	85.61
Critical pressure	bar	46.54
Critical density	kg/m <sup>3</sup>	455
Latent heat of vaporisation at boiling point	kJ/kg	239.46
Thermal conductivity at 25°C Liquid Vapour at 1.013 bar	W/m.K	0.077 0.014
Surface tension at 25°C	10 <sup>-3</sup> N/m	6.99
Viscosity at 25°C Liquid Vapour at 1.013 bar	10 <sup>-3</sup> Pa.s	0.127 0.012
Specific heat at 25°C Liquid Vapour at 1.013 bar	kJ/(kg.K)	1.567 0.890
Cp/Cv ratio at 25°C at 1.013 bar		1.131
Flammability in air		Mildly flammable
Flash point		None
Classification NF-EN 378 ASHRAE		A2L A2L
Ozone Depletion Potential		0
GWP 4th Assessment 5th Assessment		148 146

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.

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