



# R-455A (Solstice<sup>®</sup> L40X)

## **GUARANTEED COMMERCIAL SPECIFICATION**

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

\* data producer

#### MAIN APPLICATIONS

R-455A (Solstice<sup>®</sup> L40X) is a mildly flammable, non-azeotropic blend containing hydrofluorocarbons (HFCs) and hydrofluoro-olefins (HFOs) with a GWP <150. Its thermodynamic performance allows it to be used as a replacement in new equipment for R-22 and R-404A in low and medium temperature refrigeration as well as heat pumps.

#### 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





### **R-455A PHYSICAL PROPERTIES**

Molar mass	g/mol	87.45
Melting point	°C	N/A
Boiling point (at 1.013 bar)	°C	-52.03
Temperature glide at 1.013 bar	К	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	har	13.85
50°C	bar	24.43
Critical temperature	°C	87.5
Critical pressure	bar	48.22
Critical density	kg/m <sup>3</sup>	459
Latent heat of vaporisation at boiling point	kJ/kg	239.46
Thermal conductivity at 25°C		
Liquid	W/m.K	0.077
Vapour at 1.013 bar		0.014
Surface tension at 25°C	10 <sup>-3</sup> N/m	6.99
Viscosity at 25°C		
Liquid	10 <sup>-3</sup> Pa.s	0.127
Vapour at 1.013 bar	10° Pa.s	0.012
Specific heat at 25°C		
Liquid	kJ/(kg.K)	1.567
Vapour at 1.013 bar		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		A2L
ASHRAE		A2L
Ozone Depletion Potential		0
GWP IPCC 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 f or advice and information.

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http://www.climalife.dehon.com/contact\_us