



R-455A (Solstice® L40X)

GUARANTEED COMMERCIAL SPECIFICATION

| STANDARD SPECIFICATION * | LIMIT VALUE |
|---|--|
| Composition <ul style="list-style-type: none"> - 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) | ≤ 1 ppm weight |
| Non-condensable content (gas phase) | ≤ 1.5 % volume |

* data producer

MAIN APPLICATIONS

R-455A (Solstice® 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

Use, implementation and recovery 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 Safety Data Sheets (SDS) directly on our website www.climalife.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 | K | 12.85 |
| Saturated liquid density at 25°C | kg/m ³ | 1033 |
| Vapour density at boiling point | kg/m ³ | 4.747 |
| Vapour pressure at: 25°C 50°C | bar | 13.85 24.43 |
| Critical temperature | °C | 87.5 |
| Critical pressure | bar | 48.22 |
| Critical density | kg/m ³ | 459 |
| 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 ⁻³ N/m | 6.99 |
| Viscosity at 25°C Liquid Vapour at 1.013 bar | 10 ⁻³ 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 PE(S)R | | A2L Category 1 |
| Ozone Depletion Potential | | 0 |
| GWP according to Regulation (EU) 2024/573 (F-Gas III) GWP (AR4 / AR6) | (CO ₂ = 1) | 146 148 / 166 |

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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