



VIN-FP-550/005

# climalife®

## Solstice® ze

R-1234ze - (Trans-1,3,3,3-tetrafluoroprop-1-ène)

### GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATION*	LIMIT VALUE
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

**Solstice™ ze** is a single component fluorinated gas from the HFO family. This product has a very low GWP figure and is suitable for refrigeration, chillers and heat pumps applications.

### 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 **Solstice™ ze** are governed by EU Regulation n° 517/2014.

The recovery of **Solstice™ ze** is mandatory under EU Regulation n° 517/2014.

(Refer to regulations enforced in each country)

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



Solstice<sup>®</sup> ze

climalife<sup>®</sup>

## SOLSTICE<sup>®</sup> ZE PHYSICOCHEMICAL PROPERTIES

Molar mass	g/mol	114.04
Melting point	°C	-104.53
Boiling point (at 1.013 bar)	°C	-18.98
Saturated fluid density at 25°C	kg/m <sup>3</sup>	1163
Vapour density at boiling point	kg/m <sup>3</sup>	5.705
Vapour pressure at: 25°C	bar	4.99
50°C	bar	9.97
Critical temperature	°C	109.4
Critical pressure	bar	36.35
Critical density	kg/m <sup>3</sup>	489.24
Latent heat of vaporisation at boiling point	kJ/kg	195.62
Thermal conductivity of liquid at 25°C	W/m.K	0.0744
Thermal conductivity of vapour at 1.013 bar	W/m.K	0.014
Surface tension at 25°C	10 <sup>-3</sup> N/m	8.85
Viscosity of liquid at 25°C	10 <sup>-3</sup> Pa.s	0.199
Viscosity of vapour at 1.013 bar	10 <sup>-3</sup> Pa.s	0.0123
Specific heat of liquid at 25°C	kJ/(kg.K)	1.386
Specific heat of vapour at 1.013 bar	kJ/(kg.K)	0.889
Cp/Cv ratio at 25°C under 1.013 bar		1.101
Flammability in air		Mildly flammable
Flashing point		None
Classification NF-EN 378 ASHRAE PED		A2L A2L PED Category 2
Ozone Depletion Potential		0
GWP According to IPCC-AR4/IPCC-AR5		7/1

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.

**Solstice™ is trademark of Honeywell International Inc.**

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For more information, please visit our website:



[http://www.climalife.dehon.com/contact\\_us](http://www.climalife.dehon.com/contact_us)