



Refrigerants

# R-1270

## **Propylene**

#### **GUARANTEED COMMERCIAL SPECIFICATIONS**

STANDARD CHARACTERISTICS	LIMIT VALUE
Purity	≥ 99.5 % weight
Total polyolefins C3 – C4 – C5	≤ 0.05 % weight
Other volatile impurities	≤ <b>0.</b> 5 % weight
High boiling residues	≤ 0.01 % weight
Non-condensable content (gas phase)	≤ 1.5 % volume at 25°C
Water content	≤ 10 ppm weight
Sulphur odour	Odourless
Total acidity (HCL)	≤1 ppm weight
Particles / Solids	Clear

## **MAIN APPLICATIONS**

R-1270 is a hydrocarbon for industrial refrigeration applications.

## **OILS**

Use an oil adapted to the machine (mineral (MIN), polyalphaolefin (PAO), polyalkylene glycol (PAG), etc.). Check with **Climalife** the viscosity of the oil chosen according to your application and its miscibility with the fluid in question.

#### **PRECAUTIONS OF USE**

Refer to the Safety Data Sheet\*.

## **REGULATION**

R-1270 is a product classified as extremely flammable (A3).

Refer to the decree of 14 February 2000 (ERP) published in the Official Journal of 21 March 2000.

(Refer to the regulations in force in the country concerned)

<sup>\*</sup>Find the Safety Data Sheets (SDS) directly on our website www.climalife.dehon.com.



## **PHYSICAL PROPERTIES OF R-1270**



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Molar mass	g/mol	42.1
Melting point	°C	-184.56
Boiling point (at 1.013 bar)	°C	-47.62
Saturated liquid density at 25°C	kg/m³	506
Vapour density at boiling point	kg/m³	2.358
Vapour pressure at:		
25°C	bar	11.54
50°C		20.54
Critical temperature	°C	91.06
Critical pressure	bar	45.55
Critical density	kg/m³	230
Latent heat of vaporisation at boiling point	kJ/kg	438.89
Thermal conductivity at 25°C		
Liquid	W/m.K	0.105
Vapour at 1.013 bar	W/III.K	0.017
Surface tension at 25°C	10 <sup>-3</sup> N/m	6.96
Viscosity at 25°C		
Liquid	10 <sup>-3</sup> Pa.s	0.094
Vapour at 1.013 bar		0.009
Specific heat at 25°C		
Liquid	kJ/(kg.K)	2.669
Vapour at 1.013 bar		1.551
Cp/Cv ratio at 25°C at 1.013 bar		1.157
Flammability in air		Non-flammable
Flash point	°C	-108
Classification NF-EN 378 / ASHRAE		A3 / A3
Ozone Depletion Potential		0
GWP		2 according to UNEP OZONE
		Report 2010

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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