



R-124

(1CHLORO 1,2,2,2, TETRAFLUOROETHANE CHCLF-CF₃)

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Purity (two isomers) F124 + F124a	≥ 99.8 % weight
Water content	≤ 10 ppm weight
Chloride ion test	negative
Acidity (HCl)	≤ 1 ppm weight
Non-condensable content (gas phase)	≤ 1.5 % volume
High-boiling residues	≤ 0.01 % volume

MAIN APPLICATIONS

R-124 is a HCFC type "hydrochlorofluorocarbon" transition compound of usage regulated over time (Montreal Protocol), particularly suitable for air conditioning devices operating in high temperature environments, and for recovering energy.

It has been used preferably in new setups for replacing R-114 (CFC).

OILS

Use a mineral (MN) oil or alkylbenzene (AB) oil.

Check with **Climalife** regarding the viscosity of the oil selected for your application, and the miscibility with the fluid under consideration.

PRECAUTIONS OF USE

Refer to the Safety Data Sheet *.

REGULATION

Using **R-124** is governed by European regulation n° 2037/2000 of June 29, 2000:

- using **R-124** is completely prohibited in new setup as of 12.31.2003
- using virgin **R-124** is prohibited for maintenance and service as of 01.01.2010
- using **R-124**, even recycled, is completely prohibited as of 01.01.2015.

In Europe, **R-124** recovery is mandatory as per regulation n° 842/2006.

(Refer to regulations enforced in each country)

* Find the Safety Data Sheet (SDS) directly on our website www.climalife.dehon.com.



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R-124 PHYSICO-CHEMICAL PROPERTIES

Molar mass	g/mol	136.48
Melting point	°C	- 199.15
Boiling point (under 1.013 bar)	°C	- 11.97
Critical temperature	°C	122.28
Critical pressure	bar	36.24
Critical density	kg/m ³	560
Latent heat of vaporisation at boiling point	kJ/kg	165.9
Thermal conductivity at 25°C		
Liquid	W/(m.K)	0.06815
Vapour under 1.013 bar		0.01149
Surface tension at 25°C	10 ⁻³ N/m	9.66
Viscosity at 25°C		
Liquid	10 ⁻³ Pa-s	0.2359
Vapour under 1.013 bar		0.01159
Specific heat at 25°C		
Liquid	kJ/(kg.K)	1.135
Vapour under 1.013 bar	kJ/(kg.K)	0.7416
Cp/Cv ratio at 25°C under 1.013 bar		1.103
Flammability in air		non-flammable
Flashing point		none
NF-EN 378 classification		L1
Potential effect on ozone	(R-11 = 1)	0.022

Please contact your distributor or **Climalife** sales department for more information. Also, if the refrigerated system you want to install does not appear to you as a typical case, we are at your service to provide opinions and advices.

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.

For more information, please visit our website:

http://www.climalife.dehon.com/contact_us

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