



R-401B

(ZEOTROPIC MIXTURE)

GUARANTEED COMMERCIAL SPECIFICATIONS

STANDARD SPECIFICATIONS	LIMIT VALUE
Composition	
R-22	61 % (+ 1.5% - 0.5%)
R-152a	11 % (+0.5 % -1.5 %)
R-124	28 % (\pm 1%)
Water content	\leq 10 ppm weight
Acidity (HCl)	\leq 0.1 ppm weight
Non-condensable content (gas phase)	\leq 1.5 % volume
High-boiling residues	\leq 0.01 % volume

MAIN APPLICATIONS

R-401B is a HCFC type "zeotropic" transition mixture, of usage regulated over time (Montreal Protocol), and designed for current R-12 (CFC) uses in refrigerated transport equipment, in domestic and commercial freezers. This fluid can also replace R-500 in existing setups.

OILS

Use an alkylbenzene (AB) or even polyol ester (POE) oil in agreement with the compressor manufacturer. 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 *.

VORSCHRIFTEN

Using **R-401B** is governed by European regulation n° 2037/2000 of June 29, 2000:

- using **R-401B** is completely prohibited in new setup as of 12.31.2003
- using virgin **R-401B** is prohibited for maintenance and service as of 01.01.2010
- using **R-401B**, even recycled, is completely prohibited as of 01.01.2015.

In Europe, **R-401B** 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.



R-401B

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R-401B PHYSICO-CHEMICAL PROPERTIES

Molar mass	g/mol	92.84
Melting point	°C	N/A
Boiling point (under 1.013 bar)	°C	-35.74
Temperature drift under 1.013 bar	K	4.94
Saturated fluid density at 25°C	kg/m ³	1181
Saturated vapour density at boiling point	kg/m ³	4.846
Saturated liquid vapour pressure at 25°C	bar	8.55
Critical temperature	°C	103.5
Critical pressure	bar	46.82
Critical density	kg/m ³	497.6
Latent heat of vaporisation at boiling point	kJ/kg	228.3
Thermal conductivity at 25°C		
Liquid	W/(m.K)	0.08038
Vapour under 1.013 bar		0.01116
Surface tension at 25°C	10 ⁻³ N/m	-
Solubility at 25°C		
- of water in the fluid	% weight	0.10
Viscosity at 25°C		
Liquid		0.1735
Vapour under 1.013 bar	10 ⁻³ Pa-s	0.01223
Specific heat capacity at 25°C		
Liquid	kJ/(kg. K)	1.28
Vapour under 1.013 bar	kJ/(kg. K)	0.7263
Cp/Cv ratio at 25°C under 1.013 bar		1.155
Flammability in air		non-flammable
NF-EN 378 Standard		L1
Potential effect on ozone (ODP)	(R-11 = 1)	0.035

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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