

QUICKSOLV™ DEF 90 EL



FEATURES

Applicable to many industries, **QUICKSOLV™ DEF 90 EL** is a specialty solvent developed to replace HCFC and isopropyl alcohol in a manual application to remove residues.

QUICKSOLV™ DEF 90 EL is a non-azeotropic formulation of NOVEC™ 7100 and 1,2-transdichlorethylene. It is clear and colourless with a slight odour, designed to replace existing solvents that have an ODP and are hazardous. **QUICKSOLV™ DEF 90 EL** is intended for use in cold cleaning operations.

This High-Tech fluid has no ODP. Its thermal and chemical stability, its non-flammability, and its very low toxicity provide the best compromise between efficiency, safety of use, and the environment.

SPECIFICATIONS

Characteristics	Unit	Values	Method
Aspect		Transparent, colourless	Visual
Purity	%	99,8	
Non volatile residues	ppm	≤ 2.0	
NOVEC™ 7100	% weight	10	
1,2-transdichlorethylene	% weight	90	

CHARACTERISTICS

Properties	Unit	Quicksolv™ DEF 90 EL	CFC-113	HCFC-141b	Trichlor- ethylene	Methylene Chlorid
Boiling point	°C	≈ 43	48	32	87	39.8
Freezing point	°C	≈ - 130	- 35	- 103	- 86	- 96.7
Flash point	°C	none	none	none	none	none
Density	g/cm ³	1.27	1.56	1.23	1.46	1.32
Surface tension	mN/m	13.6	17.3	19.3	22	25.5
Solubility of solvent in water	ppm	not soluble	110	2700	1100	19000
Kauri Butanol	-	> 100	> 70	> 80	> 120	> 100
Heat transfer						
Vapour pressure	kPa	65	44.1	75.9	10	73.6
Dynamic viscosity	mPa.s	0.4	0.68	0.43	0.62	0.425
Latent heat of vaporization	kJ/kg@bp	180	146	223	265	391
Specific heat	kJ/kg K	1.10	0.92	1.26	0.93	1.3

PACKAGING

Packaging types of 30 l and drums of 217 l are available.

STORAGE & SHELF LIFE

This non-azeotropic blend, **QUICKSOLV™ DEF 90 EL**, is not flammable when stored and used in normal conditions.. This fluid is highly resistant to thermal and chemical reactions. More information is detailed in the Material Safety Data Sheet which is available on request.

To ensure the best product performance it is recommended to store the products in closed containers.
Shelf life : 18 months under these conditions.

USE CONDITIONS

Material compatibility

As with most solvents, **QUICKSOLV™ DEF 90 EL** is absorbed by the plastics and the fluorinated elastomers in case of a prolonged exposure.

Metals	Plastics	Elastomers
Aluminium	Nylon	Butyl rubber*
Copper	Polyethylene	Natural rubber*
Carbon steel	PTFE	Buna-S*
Stainless steel	Polyester	EPDM
Brass	Epoxy resin	Chlorosuphonated PE
Molybdenum		Polysulphide
Tantalum		
Tungsten		
Alloy Cu/Be C172		
Alloy Mg AZ32B		

* swelling

Tested compatibility for an exposure of 1 hour at boiling temperature.

*Butyl rubber is preferable for a prolonged exposure > 1 month.

Exceptions : swelling of PTFE and silicon rubber.

The compatibility tests of **QUICKSOLV™ DEF 90 EL** show a good compatibility with a large range of metals, plastics and elastomers, similar to the performance of perfluorinated liquids. When used with other materials, it is recommended to test the compatibility along the process.

HSE

Property	units	Quicksolv DEF 90 EL	CFC-113	HCFC-141b	Trichlor- ethylene	Methylene Chloride
Environmental data						
Ozone depletion pot.	ODP	0.00	0.80	0.10	< 0.005	< 0.005
Global warming pot.	GWP	320	5000	630	< 10	< 100
Atmospheric lifetime	years	4.1	85	9.4	8	0.5
Toxicity						
Exposure average: 8h	ppm	200	500	500	25	50
VOC		yes	yes	yes	yes	yes

R phrases	:	R 20	:	Harmful by inhalation.
		R 52/53	:	Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.
S phrases	:	S 23	:	Do not breathe vapour, fumes and spray.
		S 24/25	:	Avoid contact with skin and eyes.
		S 28	:	After contact with skin, wash immediately with plenty of soap and water.
		S 51	:	Use only in well-ventilated areas.
		S 61	:	Avoid release to the environment. Refer to special instructions/safety data sheet.

Please read carefully the safety data sheet of the product **QUICKSOLV™ DEF 90 EL** before use. All safety measures should be taken. In all kind of handling or exposition to the product, the individual protection recommended by the safety data sheet should be taken. This product contains a high purity transdichlorethylene with a TLV of 200 ppm (TWA 8h exposure). The concentration of cis-dichlorethylene is certified lower than 300 ppm. This product is then complying with the regulation and authorized by the INRS. The typical figures used here above can be changed without notice.

Although the conformity to ROHS 2002/95CE applies EQUIPMENT put on the market and not a component in particular, we warranty that this product contains less than 0.1% of mercury, lead, chromium VI, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) and less than 0.01% for the cadmium, in accordance with the decision of The European Commission dated 18/08/2005, fixing the maximal concentration values.

This data is based on information that the manufacturer believe to be reliable and offered in good faith. In no event will INVENTEC be responsible for special, incidental and consequential damages. The user is responsible to the Administrative Authorities (regulations for the protection of the Environment) for the conformity of his installation.

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