

TOPKLEAN™ EL-20R



Electronic Cleaner

FEATURES

Cleaning and solder flux removal solvent.

TOPKLEAN EL-20R has been specially developed for the cleaning of solder paste residues and all types of solder fluxes as well as misprinted solder pastes on PCBs.

The use of **TOPKLEAN EL-20R** as a co-solvent together with NOVEC™ HFE highly increases its cleaning and drying performances.

TOPKLEAN EL-20R is an hydro carbonided product with a high solvent power and an halogen and aromatic-free cleaning agent.

SPECIFICATIONS

	Unit	Test method	Value
Flash point (PMCC)	°C	ASTM D93	62
Density at 20°C	Kg/m ³	ASTM D4052	808

CHARACTERISTICS

Properties	Unit	Test method	Value
Aspect		Visual	Colourless liquid
Vapour pressure at 20°C/50°C)	hPa (mbar)	No standard method	1/6
Viscosity at 25°C	mm ² /s	ASTMD 445	1.6
Boiling range	°C	ASTM D1078	174-199
Water content	% weight	ASTM E1364	max. 0.1
Aromatics	% weight	SMS 2728	max. 0.1
Non volatile residue	g/100 ml	ASTM D1353	max. 0.01
Relative evaporation rate	nBuAc-1	ASTM D3539	0.06
Miscibility in water			Not miscible

ASTM methods are published by the American Society for Testing and Materials, 1916 Race street, Philadelphia, Pa 19103, USA and are available in Europe from ASTM European office, 27-29 Knowl Piece, Wilbury Way, Hitchin, Herts, SG4 OSX, UK.

DIN methods are published by Beuth Verlag GmbH, Burggrafenstrasse 4-7, D1000, Berlin, Germany.

PACKAGING

Can	20 L
Drum	200 L

STORAGE & SHELF LIFE

Suitable materials for the storage are mild steel, stainless steel and polypropylene. Keep the product in closed conditioning at a temperature below 50°C.

Shelf life	18 months
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PROCESS PARAMETERS

TOPKLEAN EL-20R is an effective agent for the removal of solder flux and undesirable residues from printed circuit boards.

TOPKLEAN™ EL-20R is intended for non-aqueous cleaning systems, dipping or spraying, with or without ultrasonics. **TOPKLEAN™ EL-20R** is also used in metal cleaning operations and in general for the removal of finger prints.

Other benefits of **TOPKLEAN EL-20R** are :

Low consumption increasing bath lifespan.
Low viscosity,
Relatively fast evaporation.

HSE

Properties	Unit	Test method	Value
Hazard class	-	VbF Germany	AllI
Lower explosion limit in air (20°C)	% v/v	DIN 51649	0.6 (41 g/m ³)
Upper explosion limit in air (150°C)	% v/v	DIN 51649	5.5 (365 g/m ³)
Auto ignition temperature	°C	DIN 51794	274

TOPKLEAN EL-20R is not regarded as a flammable product, but as a burnable one. All relevant measures against fire and risks must be fulfilled. Avoid contact with eyes and skin.

TOPKLEAN EL-20R has a low environmental impact, emissions are very low at operating temperatures. It does not harm the ozone layer and is easily biodegradable.

TOPKLEAN EL-20R can be recycled by vacuum distillation without affecting composition and properties.

The used **TOPKLEAN EL-20R** can be collected and recovered or disposed easily as waste oil by outside contractors. For full advice, please contact your local distributor.

Please refer to the Material Safety Data Sheet before use.
No issues when used as recommended.

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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