

TOPKLEAN™ EL-20F



Cleaning solvent, defluxing in electronics

FEATURES

TOPKLEAN™ EL-20F is a very efficient cleaning agent to eliminate solder flux, glue and varnish residues of PCB's.

TOPKLEAN™ EL-20F has no aromatic or chlorinated compounds, emulsifying agents and other complex chemical constituents, and therefore, it is less dangerous for health and **more respectful of environment** than classical products.

SPECIFICATIONS

Characteristics	Units	Methods	Values
Flash point (PMCC)	°C	ASTM D 93	64
Density (at 20°C)	kg/m ³	ASTM D 4052	800

CHARACTERISTICS

Types	Units	Methods	Values
Aspect		Visual	Colourless
Viscosity (at 25°C)	mm ² /s	ASTM D 445	1.65
Vapour pressure (at 20°C)	hPa	No standard method	1.6
Surface tension (at 20°C)	mN/m	ASTM D 971	23
Acid index	mg/g		9 – 11
Water content			< 1 %
Latent heat of vaporization at boiling point	kJ/kg	Calculated	320
Heat conductivity (at 20°C)	W/m.K	Calculated	0.13
Specific heat (at 20°C/50°C)	kJ/kg.K	Calculated	2.0/2.1
Distillation interval	°C	ASTM D 1078	170-250
Relative evaporation rate	nBuAc=1	ASTM D 3539	0.06
Dielectric rigidity	kV/cm	DIN/VDE 0370/5	200
Miscibility in water			Partially soluble

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

Packaging types of 20 l and drums of 200 l available.

STORAGE & SHELF LIFE

Storage containers can be made of soft steel, stainless steel or polypropylene. Please avoid contact with eyes and skin. For further information, please refer to Material Safety Data Sheet.

Keep all products in closed packaging.
Shelf life : 18 months.

PROCESS PARAMETERS

“Forced” cleaning techniques such as pulverisation, immersion, sprays under immersion and ultrasonics can be used for cleaning with **TOPKLEAN™ EL-20F**. It can be used in different processes and it can be rinsed with products from INVENTEC, NOVEC™ or PROMOSOLV™ range or by a semi-aqueous process.

TOPKLEAN™ EL-20F can also be used in precision mechanic to eliminate finger prints due to handling and to eliminate certain varnish.

Besides a great cleaning efficiency, its low evaporation provides low product consumption leading to a long lifetime of the sumps.

Maximum temperature is 50°C in order to minimize the vapour emissions.

HSE

TOPKLEAN™ EL-20F can't be regenerated by vacuum distillation without affecting composition and properties. Contaminated **TOPKLEAN™ EL-20F** can be recovered and destroyed like contaminated oils by specialised companies. For further information, please contact your distributor.

TOPKLEAN™ EL-20F is not considered as a flammable product, but nevertheless as combustible.

TOPKLEAN™ EL-20F has a very low impact on the environment and generates very low emissions under working temperature conditions. It has no ozone-depleting potential, it is partially soluble in water and it is biodegradable.

Used product, contaminated with residues can be easily recovered and sent to destruction for disposal.

Before using **TOPKLEAN™ EL-20F**, please refer carefully to the Material Safety Data Sheet.

For end-of-life products, please refer to our service sheet [Ecoprogram solvents](#).

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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