

# TOPKLEAN™ MC-20D

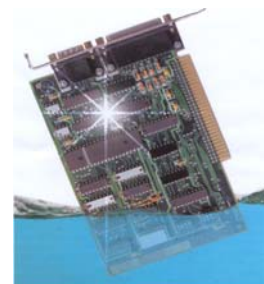


## FEATURES

Used for the mechanic and electronic industry, **TOPKLEAN™ MC 20D** has been specially developed to **eliminate** oils, greases, finger prints and **solder flux for all kind of materials**.

**TOPKLEAN™ MC 20D** is a concentrated oxygenated polar compounds based product with a light odour. **TOPKLEAN™ MC 20D** is a very efficient cleaning agent, when used **by spraying**, with **ultrasonics** or **spray under immersion**. It can also be used **in inline systems** or **vacuum equipments** or with **INVENTEC's** products like, **NOVEC™** or **PROMOSOLV™** range.

**TOPKLEAN™ MC 20D** 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
Aspect		Visual	Colourless
Density (at 20°C)	kg/m <sup>3</sup>	ASTM D 4052	880 ± 10
Viscosity (at 25°C)	mm <sup>2</sup> /s	ASTM D 445	1.6

## CHARACTERISTICS

TYPES	Units	Methods	Values
Flash point (PMCC)	°C	ASTM D 93	≥ 64
Vapour pressure (at 20°C/50°C)	hPa	No standard method	1/6
Surface tension (at 20°C)	mN/m	ASTM D 971	23
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	170-180
Relative evaporation rate	nBuAc=1	ASTM D 3539	0.04
Dielectric rigidity	kV/cm	DIN/VDE 0370/5	200
Miscibility in water	-	-	slightly miscible

## PACKAGING TYPE

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

## STORAGE & SHELF LIFE

Storage containers can be of soft steel, stainless steel or polyethylene. 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

**TOPKLEAN™ MC 20D** can be used neat in all the installations adapted to solvents with a flash point over 55°C, type AIII. Vacuum distillation can be easily accomplished in closed circuits leading to low product consumption.

Due to its good drying qualities, **TOPKLEAN™ MC 20D** is also used in screen printing to remove no-clean solder pastes, such as ECOREL™ 800 range from INVENTEC, and no-clean pastes, as well as rosin-based and hydro soluble fluxes, and CMS or conductor adhesives.

It can also be rinsed with products from INVENTEC™, 3M™ NOVEC™ and PROMOSOLV™ range.

## HSE

TYPES	Units	Values
<b>Environmental data</b> Ozone depletion potential	ODP	0
Global warming potential	GWP	N/A
<b>Toxicity</b> Exposure average: 8h	TLV ppm	> 500
VOC	-	YES

**R phrases :** R 36/38 : Irritating to eyes and skin  
**S phrases :** S 24/25 : Avoid contact with skin and eyes  
 S 26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**TOPKLEAN™ MC 20D** can be recycled by vacuum distillation without affecting composition and properties. Contaminated **TOPKLEAN™ MC 20D** can be recovered and destroyed like contaminated oils by specialised companies. For further information, please contact your distributor.

**TOPKLEAN™ MC 20D** is not considered as a flammable product, but nevertheless as combustible material. In regular conditions of implementations, it can be used safely for the operator, the equipment, the workshop and environment. Before using **TOPKLEAN™ MC 20D**, please refer carefully to the Material Safety Data Sheet. All appropriated security measures regarding fire and explosion risks must be taken. During handling or exposition to the product, the individual protection recommended by the Safety Data Sheet must be granted. The typical figures used here above can be changed without notice.

**TOPKLEAN™ MC 20D** has a very low impact on environment and generates low emissions at use temperature. It has no ozone depletion potential. It is not soluble to water and is biodegradable. When contaminated with residues, it can be easily recovered and sent to disposal. This is a sum up of **TOPKLEAN™ MC 20D**, environmental characteristics, please refer to the Material Safety Data Sheet for further information.

***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.***

*The information contained in this product sheet is given for indicative purposes and in no way incurs the liability of INVENTEC. All users are liable, with respect to Administrative Authorities (regulation of facilities classified for the protection of the environment) for the compliance of their installation.*

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