



CLEANING

TOPKLEAN™ EL 20B

REMOVAL OF FLUX RESIDUES
CO-SOLVENT PROCESS
EVOLUTION OF TOPKLEAN EL 20A

BENEFITS

TOPKLEAN EL 20B is a minor evolution of TOPKLEAN EL 20A and it is especially designed to clean solder flux residues after reflow. While removing almost any solder flux residues, it also leaves no white residues and provides a shiny effect on alloys & metals.

It is used in co-solvent process to offer a fast & sustainable cleaning process with very high cleaning efficiency. In this process, TOPKLEAN EL 20B is rinsed perfectly with solvents from our PROMOSOLV™ range.

The co-solvent process has been a game changer for over 15 years now and is qualified by several actors in the electronic & semicon industry. It has been developed to replace solvents with a high HSE impact with a more sustainable solution and with equally strong cleaning performance. It particularly stands out when addressing low stand-off components. In contrast, a water-based cleaning system carries the risk that the cleaning chemistry may not be adequately removed due to the significantly higher surface tension of water.

PERFORMANCE	<ul style="list-style-type: none"> ▪ Excellent solubility organic & mineral residues ▪ Very low surface tension to allow excellent cleaning under low stand-off components ▪ Excellent compatibility with materials used on PCB's ▪ Allows shining effect to sensitive alloys & soldered surfaces
COST	<ul style="list-style-type: none"> ▪ Fast process allows increase in production capacity ▪ Rinsing fluid is constantly recycled, limiting consumption ▪ No water consumption & no need for wastewater treatment
HSE	<ul style="list-style-type: none"> ▪ Non-toxic & no CMR substances ▪ No Ozon Depletion Potential (ODP) ▪ No Global Warming Potential (GWP) ▪ Relative high flash point - safe to use, storage & transport ▪ No aromatics & halogenated compounds

SPECIFICATIONS

SPECIFICATIONS	VALUES	METHODS
Aspect	Transparent, colorless	Visual
Density (g/ml @20°C)	0.830 ± 0.010	BRY MO 028

CHARACTERISTICS

CHARACTERISTICS	VALUES	METHODS
Boiling point (°C/°F)	>170°C/>338°F	ASTM D1078
Flash Point (PMCC)	65°C/149°F	ASTM D93
Surface tension (dynes/cm @ 20°C)	41	ASTM D971
Miscibility in water	Not miscible	Internal
Presence of aromatic compounds (% weight)	<0.01%	SMS 2728

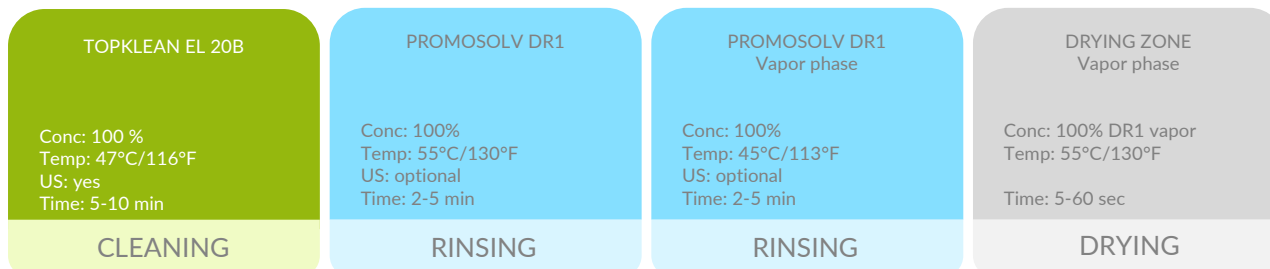
PROCESS RECOMMENDATION

The best process will depend on factors such as operating conditions, equipment, desired cleaning time and the nature of contaminants. Our team is ready to advise you.

- Do not remove parts too quickly out of the drying zone to prevent unwanted loss of solvent.
- A dedicated PCA Kit to monitor the bath status and compatibility report with different materials is available on request.

PROCESS EXAMPLE

Separated co-solvent process



Mixed co-solvent process



PACKAGING, STORAGE & SHELF LIFE

- Keep products in closed original packaging and store at room temperature.
- Shelf life is minimum 18 months from production date when kept in recommended conditions.

AVAILABLE PACKAGING



20L CANISTER

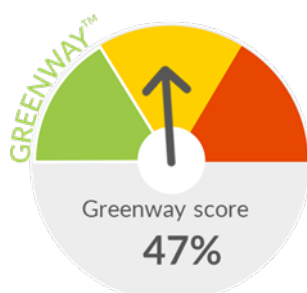


200L DRUM

Please verify the packaging details, including volume and availability, with your sales representative, as they may vary depending on the production facility where the product is manufactured.

HEALTH, SAFETY & ENVIRONMENT

TOPLEAN EL 20B is **NOT** a **GREENWAY** product. Although fully in line with safety & environmental regulations, this product doesn't match our strict criteria to be labelled as a Greenway product. More info on our Greenway concept via [this link](#).



LOOKING FOR A MORE SUSTAINABLE SOLUTION?

GREENWAY ALTERNATIVE

- We currently don't have a Greenway alternative but our target is to develop one in the near future. In case you want us to prioritize the development of a Greenway alternative, do not hesitate to contact us.

Contains no Reach Substances (on Candidate list, Annex XIV & XVII) / Contains no persistent organic pollutant (EC 850/2004) / Contains no Import/Export Hazardous substances (EU 649/ 2012).

Please refer always to the Safety Data Sheet (SDS or MSDS) prior to use. Our SDS can be downloaded at www.quickfds.com. We will request to provide your email address, so we can automatically send you a new version of the SDS when a future update would occur.

TECHNICAL SUPPORT & FREE-OF-CHARGE TESTING

Inventec has a worldwide dedicated Technical Support team to help you along the various stages of our cooperation.

Depending on your request, we provide online or onsite support

- to select the right product based on your specific needs.
- to assist you in your product qualification process.
- to guide you with the initial set up of your process at all your worldwide manufacturing facilities.
- to provide fast response on technical issues which could occur at any time during mass production.

Customers are also welcome in our CLEANING CENTERS to see the process in action and to get convinced by our solutions. We cover water- and solvent based processes.

Inventec is unique in the world by developing not only cleaning materials but also soldering and coating solutions. These materials are very closely linked with each other from a process point of view. Talking to our Technical Team, who understands very well these 3 different product groups, will help you greatly to overcome technical challenges within your overall process.

Contact our technical support via contact@inventec.dehon.com or your local sales representative.

ABOUT INVENTEC

Inventec is a global provider of SOLDERING, CLEANING, COATING, COOLING materials for Electronic, Semiconductor and Industrial applications. For over 60 years we have shown leadership in innovation by putting HEALTH IMPACT, SUSTAINABILITY and RELIABILITY at the core of our product development.

With ISO 9001 & 14001 production sites in France, Switzerland, USA, Mexico, Malaysia and China we can guarantee a smooth and cost-effective supply chain.

We supply to many industries but the excellent performance of our products in applications which demand high reliability, leads us to focus especially on the AUTOMOTIVE, AEROSPACE, SEMICONDUCTOR, ENERGY and MEDICAL industry.

www.inventec.dehon.com



SOLDERING
CLEANING
COATING
COOLING

In accordance with the Annex II of Directive 2011/65/UE (RoHS), including its amendments, we certify that this product does not contain quantities above 0.1% of Hg, Pb, Cr VI, PBB, PBDE, DEHP, BBP, DBP, DIBP and above 0.01% of Cd

This data is based on information that the manufacturer believes to be reliable and offered in good faith. In no event will INVENTEC PERFORMANCE CHEMICALS 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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