



COATING

PROMOSOLV™ COAT UT10D-UV

ULTRA-THIN COATING
DIPPING PROCESS
WITH UV TRACER

BENEFITS

PROMOSOLV COAT UT10D-UV is a transparent hydrophobic and oleophobic ultra-thin coating to protect electronics and other surfaces against moisture, corrosion and other environmental conditions that could jeopardize the reliability of the device or surface. Adheres well to a wide variety of material substrates such as plastic, glass, metal and ceramic.

This product is specially formulated with a UV tracer for easy detection under UV light to facilitate quality control.

Our PROMOSOLV COAT ultra-thin coatings don't require heat or UV light to cure. They cure in less than a minute at ambient temperatures. This accelerates processing time and reduces the need for curing equipment investment.

PROMOSOLV COAT UT10D-UV is formulated with the UT10 polymer but is using a different carrier solvent to facilitate using the product with solid content detection devices. The film properties however remain the same as PROMOSOLV COAT UT10-UV.

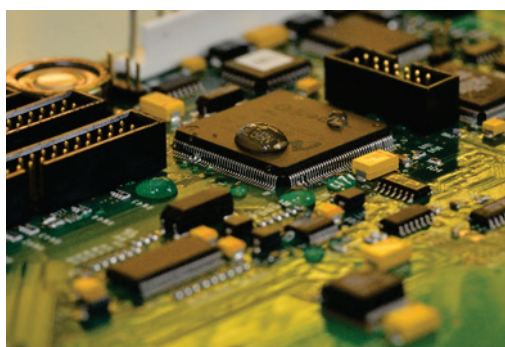
The coating is available in different solid content premixes, which provides a different dry film thickness. When using a dipping process, the 8% version is also used to top up the solid content in the coating bath.

PERFORMANCE	- Provides exceptional repellence of all kinds of liquids - Fast drying at room temperature (<1 min) - UV tracer with wide detection spectrum for easy quality control - Formulated to work with solid content detection devices
COST	- Substantial less coating needed compared with traditional conformal coatings - No curing equipment required and easy to control process - PCB masking is not required, saving on preparation time
HSE	- No CMR substances - Low environmental impact & very low VOC - Non-flammable

PCBA WITHOUT COATING



PCBA WITH COATING



PROPERTIES

PROMOSOLV COAT UT10D-UV is offered in different solid content. The liquid and film properties are the same, regardless of the solid content, which only regulates the film thickness.

PRODUCT NAME	SOLID CONTENT (WEIGHT %)	FILM THICKNESS
PROMOSOLV COAT UT10D-UV 2%	2%	Dipping: 0,1–0,2 microns / Spray: not applicable
PROMOSOLV COAT UT10D-UV 8%	8%	Dipping: 0,8–1 microns / Spray: not applicable

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LIQUID PROPERTIES

CHARACTERISTICS	PROMOSOLV COAT UT10D-UV
Chemical nature	Fluoropolymer
Appearance	clear to slightly cloudy
Density (g/cm ³) at 20°C	1,4
Solvent type	Hydrofluoroether
Solvent product name	DILUENT 10D
Solvent Boiling point	61°C/142°F
Flash point	None
Viscosity (cSt)	~1
Surface tension (mN/m or dynes/cm)	13,6

FILM PROPERTIES

CHARACTERISTICS	PROMOSOLV COAT UT10D-UV
Appearance	Clear, colourless
Surface energy (dynes/cm)	5 -10
Contact angle (ASTM D7334-08)	120° water - 80° oil
Heat stability	150°C continuous / 250°C one hour
Solder-through repairability	Yes
Solvent and chemical resistance	Excellent
Refractive index	~1,35
Tg (glass transition temperature)	75°C
Dielectric strength	2500 V/mil (2500 V/25µm)
Dielectric constant	2,25 @100 KHz
Dissipation factor	0,016 @100 KHz
Volume resistivity	4,5x10 ¹⁵ Ω.cm
Non flammability certificates	*UL94 V-0 / NF EN 60695-11-10

*Passes according to internal evaluation, official certification in progress.

PROCESS RECOMMENDATION

The best process will depend on factors such as operating conditions, equipment and process. Our team is ready to advise you.

- Only suitable for dipping process
- Recommended to apply on cleaned and dried surfaces
- Touch dry within less than a minute / No thermal or UV curing required
- Visible under UV light (around 350nm) to allow inspection after the coating is applied. The UV tracer will disappear within 1-2 weeks after the coating is applied as it has no function in the protective properties of the coating.
- To decrease the solid content in the coating bath, add the corresponding solvent (see liquid properties). To increase the solid content, add PROMOSOLV COAT UT10D-UV 8%.
- PROMOSOLV COAT DILUENT 10D can also be used to remove the coating or for nozzle and equipment cleaning.

PACKAGING, STORAGE & SHELF LIFE

- Keep products in closed original packaging and store at room temperature.
- Shelf life is 24 months from production date when kept in unopened and original packaging.

STANDARD PACKAGING



8,08KG PAIL

Please confirm the packaging details, such as volume and availability, with your sales representative, as these may differ based on the production facility. Additional packaging options are available upon request.

CLEANING BEFORE COATING

The surface to be coated must be free from any residues to ensure a strong bond between the coating and the surface. This is particularly important for electronic boards, where it's essential to verify that any flux residues are compatible with the coating to prevent undesirable effects. If cleaning is required, Inventec offers a comprehensive range of cleaning products to meet your needs.

*Inventec has over 60 years' experience in high-tech cleaning for aqueous and solvent based systems.
Our solder materials are aligned with our cleaning solutions, which guarantees excellent cleaning.*

PROCESS TYPE	PCBA DEFLUXING SOLUTIONS
Manual	Quicksolv™ DEF90, Quicksolv™ DEF70, Promoclean™ TP61
Aqueous (Immersion or spray)	Promoclean™ DISPER 607, Promoclean™ DISPER 707, Promoclean™ DISPER 800
Co-solvent	Topklean™ EL 80 + Promosolv™ rinsing solvents
Mono-solvent (vapor phase)	Promosolv™ 70ES, Promosolv™ 70IS

Other products available, depending on specific customer requirements. Check also our maintenance cleaning solutions.

HEALTH, SAFETY & ENVIRONMENT

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).

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

- No-ozone depleting & very low VOC
- Non-flammable
- No chlorine & no bromine
- RoHS compliant
- Free of PFOS and PFOAS

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.

When prior cleaning is required, 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 coating materials but also soldering and cleaning 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 and 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



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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.

Inventec Performance Chemicals – 26 rue de Coulons. 94360 Bry-sur-Marne, France
Limited company with capital of 600 000€ - 964 500 706 RCS Créteil