

INTRODUCTION

Inventec presents an innovative range of ultra-thin hydrophobic and oleophobic functional coatings, enabling exceptional repellency of moisture, water, oils, dust and other possible contaminations. An alternative to typical conformal coatings in printed circuit boards.

Optical transparent, lowviscosity, low surface tension fluoropolymer solutions that dry in seconds to form a thin protective film of 1 μm average. An easy application process and optimal coating solution to mitigate corrosion under harsh environment conditions in challenging components.

PRODUCT OVERVIEW

The solid content will regulate the thickness of the coating. A lower solid content provides a thinner coating.

PRODUCT	CHARACTERISTICS
PROMOSOLV [™] COAT UT10 2%	2% solid content
PROMOSOLV [™] COAT UT10-UV 2%	2% solid content and UV tracer
PROMOSOLV [™] COAT UT10 4%	4% solid content
PROMOSOLV [™] COAT UT10-UV 4%	4% solid content and UV tracer
PROMOSOLV [™] COAT UT10 8%	8% solid content
PROMOSOLV [™] COAT UT10-UV 8%	8% solid content and UV tracer

KEY FEATURES



Fast process without curing

Ultra-thin coatings can be applied with a simple dipping process and dry at room temperature in seconds.



Low cost of ownership

Only a $1\mu m$ layer of coating material is deposit on the surface, which results in a very low consumption of coating material. Additionally, is there no need for a curing oven, which reduces investment requirements.



Safe & sustainable

Our coatings are all non-flammable, have a low GWP, no Ozon Depletion Potential and are PFOA & PFOS free.







ULTRA-THIN COATINGS THINK DIFFERENT THINK SMART

Ultra-thin coatings are relatively new compared with the more traditional conformal coatings. Nevertheless do their added values convince manufactors to replace conformal coatings or they allow to use protective coatings for the first time and extending the life-time of their products.



ADDED VALUES

SOLVING CONSTRAINTS IN YOUR PRODUCTION PROCESS

FASTER PROCESS

Touch-dry in few seconds May not require masking Pre-cleaning can be easily build-in

SUSTAINABLE CHEMISTRY

Non-toxic Non-flammable Low GWP, no Ozone depletion Low VOC & Exempt from some VOC regulations

PRODUCTION PROCESS

LOW INVESTMENT

No need for selective spray equipment Apply by dipping is recommended No need for curing oven

SPACE LIMIT

No need of curing oven

LOW VOLUME PRODUCTION

Due to low investment requirements, ideal for proto-typing or high mix / low volume productions

ENHANCING YOUR DEVICE FUNCTIONALITY & RELIABILITY

PORTABLE DEVICES

Avoid damage of unexpected water exposure Avoid damage of spillage of beverages, oils, ... Avoid damage by dust collection

MINIATURISATION

small devices are more prone to corrosion

CHEMICAL EXPOSURE

Sulfur in air Salt water Oils, greases, ...

Equipment used at certain chemical plants

DEVICE FUNCTIONALITY

PLACED IN HUMID ENVIRONMENTS

Humid regions Maritime equipment Bathroom & swimming pool

PLACED OUTDOOR

Avoid damage by ingress of rain Avoid damage by ingress of dust and soil

PROVIDES MORE DESIGN FREEDOM & SOLVES COATING CONSTRAINTS

HEAT SENSITIVE COMPONENTS

Avoid exposure to heat

FLEXIBLE COATING

Reduce stress on components Avoid coating cracks Flexible printed circuits

SPACE & WEIGHT SAVING

Reduces the coating hight Reduces the weight Alternative to heavy enclosures PRODUCT DESIGN CONSTRAINTS

LOW DIELECTRIC CONSTANT

Avoid blocking Radio Frequency (RF) waves

OPTICAL CLEAR COATING

No loss of light emission No color change

TIN SILVER SOLDER

Lead free solders more prone to corrosion



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