

# ULTRA-THIN COATINGS Promosolv™ coat UT10

## **KEY ADVANTAGES**

- Fast process without heat or UV curing
- Low cost of ownership
- Safe & sustainable

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

Optical transparent, low viscosity, low surface tension fluoropolymer solutions that dry in seconds to form a thin protective film of average 1  $\mu$ m. Easy application process and an optimal coating solution to mitigate corrosion under harsh environment conditions in challenging components.

PRODUCT	CHARACTERISTICS
PROMOSOLV <sup>™</sup> COAT UT10 2%	Ultra-thin coating with 2% solid content
PROMOSOLV <sup>™</sup> COAT UT10-UV 2%	Ultra-thin coating with 2% solid content and UV tracer for detection
PROMOSOLV <sup>™</sup> COAT UT10 4%	Ultra-thin coating with 4% solid content
PROMOSOLV <sup>™</sup> COAT UT10-UV 4%	Ultra-thin coating with 4% solid content and UV tracer for detection



SOLDERING • CLEANING • COATING

# THINK DIFFERENT, THINK SMART

Ultra-thin coatings are relatively new compared with the more traditional conformal coatings. Most coating standards are currently not adapted to evaluate properly the use of these ultra-thin coatings for the protection of electronic assemblies.

# ADDED VALUES

# SOLVING CONSTRAINTS IN YOUR PRODUCTION PROCESS

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

#### No need for selective spray equipment Apply by dipping is recommended

No need for curing oven

LOW INVESTMENT

### **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

PRODUCT

DESIGN

**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 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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