

PROMOSOLV COAT 101X-2 UV

Ultrathin hydrophobic coating Corrosion and moisture protection for electronics

BENEFITS

Promosolv™ Coat 101X-2 UV is a transparent hydrophobic and oleophobic ultrathin coating. Its formulation is based on DryWired® 101X patented fluoropolymer technology ^[1] to protect electronics. It has been designed to provide protection against moisture, corrosion and other environmental conditions that could jeopardize the reliability of the device.

- ✓ Easy-to-apply, recommended by dipping
- ✓ Fast drying time (<1min)
- ✓ Non-flammable
- ✓ UV tracer for quality control
- ✓ Adheres well to a wide variety of material substrates as plastic, glass, metal and ceramic
- ✓ Optimal coating for challenging components in PCBA and flexible circuits
- ✓ Wide range of applications including automotive, industrial, consumer electronics, avionics, aerospace, unmanned systems, and military.



PCBA without ultrathin coating



PCBA with ultrathin coating

LIQUID PROPERTIES

PROPERTIES	PROMOSOLV™ COAT 101X-2 UV
Nature	Fluoropolymer
Appearance	Colourless, clear to slightly cloudy
Solids (weight %)	2
Density (g/cm ³) at 20°C	1.4
Solvent type	Hydrofluoroether
Boiling point of solvent carrier	61-76°C (142°F-169°F)
Flash point	None
Viscosity (cSt)	~1
Surface tension (mN/m or dynes/cm)	13,6
Environmental	Low toxicity / Non-ozone depleting / Non-flammable No chlorine nor bromine / PFOS and PFOA-free Extremely low VOC / ROHS compliant

FILM PROPERTIES

PROPERTIES	PROMOSOLV™ COAT 101X-2 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 reparability	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
UL Approvals	UL94 V-0

APPLICATION

- ✓ Dipping process recommended – typical coating thickness about 0.2 microns
- ✓ Spray application possible (especially for selective deposition)
- ✓ Film thickness depends on the application method
- ✓ Recommended to apply on cleaned and dried surfaces
- ✓ Masking may not be required
- ✓ Touch dry within a minute / No thermal cure required
- ✓ Visible under UV light to allow inspection (about 350nm)

PACKAGING, STORAGE & SHELF LIFE

PACKAGING	STORAGE	SHELF LIFE
8kg – Drum	Room temperature	2 years from the manufacturing date in unopened and original container

HSE

No issues when used as recommended.
Please refer to the Safety Data Sheet prior to use.
INVENTEC Safety Data Sheets can be found at www.quickfds.com.

Although the conformity to ROHS 2015/863/UE applies to EQUIPMENT put on the market and not a component in particular, we warranty that this product does not contains in quantities exceeding less than 0.1% of Hg, Pb, Cr VI, PBB, PBDE, DEHP, BBP, DBP, DIBP and less than 0.01% of Cd, in accordance with the decision of The European Commission, fixing the maximal concentration values.

This document and its content are provided “as is” without any express or implied warranty. In no event and under no circumstances, shall INVENTEC PERFORMANCE CHEMICALS be liable to any person or entities regarding the information provided its accuracy, completeness or fitness to any business or specific use.

INVENTEC PERFORMANCE CHEMICALS represents that it fulfils its direct obligations under the REACH and Conflict Mineral regulations.

BRY-FP-689 – v3 – 21/08/2018

[1] DryWired® 101X is a trademark of DryWired LLC