

PUS3101

Fast drying Polyurethane Conformal Coating

PUS3101 is a low-viscosity neutral polymer composite material, one-component, easy to spray, dip and brush for conformal coating application. It has good high and low temperature resistance; After curing, PUS3101 forms a transparent protective film, which has excellent insulation, moisture-proof, leakage-proof, shock-proof, dust-proof, anti-corrosion, anti-aging, corona resistance and other properties. Widely used in the surface coating protection of electronic components.

PUS3101 has modified polyurethane chemical base and is free of silicone, ketone, phenol and other materials, blue under UV light, easy to detect.

FEATURE

- Polyurethane conformal coating (free silicone coating)
- Fast drying time – 3 ~ 10 mins at room temperature
- Transparent protective layer

TYPICAL UNCURED PROPERTIES

Properties	PUS3101
Appearance	Liquid
Color	Colorless
Solid content, %	100
Viscosity *25°C, cps	400 ~ 800
Density (g/cm ³)	1.0±0.1

TYPICAL CURING PROPERTIES

Properties	PUS3101
Surface drying time (mins, 25°C)	3 ~ 10
Through Cured Time 80°C, mins	3

DIRECTION OF USE

1. Dipping: fill the immersion barrel with adhesive for dip coating. To prevent air bubbles, the immersion speed of the circuit board or components shouldn't be too high.
2. Spraying: fill the spray can with adhesive and start spraying. After spraying, clean the spray can with thinner.
3. If the coating layer is too thick, thinner can be added to decrease the thickness. The suggested diluent addition ranges from 20% to 40%.

TYPICAL CURED PROPERTIES

Properties	PUS3101
Tensile strength (MPa)	4.5
Elongation at break (%)	100
Durometer Hardness, Shore A	65
Shear strength (MPa)	2.5
Peel strength N/mm	> 6
Dielectric strength (kV/mm)	50
Dielectric constant (@1.2 MHz)	2.7
Dissipation factor (@1.2 MHz)	2 x 10 ⁻³
Volume resistance (Ohm-cm)	1 x 10 ¹⁴
Operating temperature (°C)	-50 ~ 150

Note: All mechanical and electrical properties are at 25°C. Measured after curing for 7 days at 55% humidity.

STORAGE AND SHELF LIFE

Sealed storage in a cool and dry place, the storage period is 6 months. After the expiration date, it can still be used after passing the inspection.

CAUTION

1. Unused fluid should be kept sealed. When using it again, if there is a crust on the seal or on the surface, just remove it, and it will not affect the normal use.
2. The construction site should have good ventilation facilities.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.