

## **Technical Data Sheet**

# **SS3104**

## Silicone Conformal Coating

SS3104 is a silicone-based, one-component coating material used for coating electronic component, providing the wide range of operating temperature up to  $200^{\circ}$ C. It has a low-viscosity neutral polymer material, which is easy to spray, dip and brush for conformal coating application. The cured product has good dielectric properties, weather resistance, pollution resistance, UV resistance, and excellent moisture-proof insulation performance.

#### **FEATURE**

- Silicone based, one component
- Fast tack free time
- Low viscosity, can be sprayed, dipped, brushed or poured
- Moisture proof, anti-corrosion, and weather resistance
- Non- toxic
- Contains fluorescent indicator for UV detection

## **TYPICAL UNCURED PROPERTIES**

Properties	SS3104
Appearance	Liquid
Color	Colorless
Viscosity *25°C, cps	300 – 500
Density (g/cm )	0.9 – 1.1
Solid content, %	50

## **TYPICAL CURING PROPERTIES**

Properties	SS3104
Surface drying time, min	10-30 @25°C
Recommended curing time (hrs, 25°C)	24
Recommended coating thickness (um)	30 - 80

#### **DIRECTION OF USE**

- 1. Dipping: immerse the sample vertically in the liquid until the air bubble disappear, then slowly lifted out. The immersion speed of the circuit board or components should not be too fast to avoid bubbles.
- 2. Spraying: fill the spray can with material and start spraying. Use suitable solvent to clean the spray valve preventing coating to be stuck inside when machine not working
- 3. To achieve the best bonding effect, the surface on which this product is applied must be clean and dry.

## **TYPICAL CURED PROPERTIES**

Properties	SS3104
Durometer Hardness, Shore A	80
Dielectric strength (kV/mm)	20
Dielectric constant (1.2 MHz)	3.0
Dissipation factor (1.2MHz)	0.005
Tensile strength (MPa)	1.0
Elongation at break, %	100
Volume resistance (Ohm-cm)	2.0 x 10 <sup>14</sup>
Operating temperature (°C)	-50 ~ 250

## STORAGE AND SHELF LIFE

When stored below 25  $^{\circ}\mathrm{C}$  and unopened in the original packaging, the shelf life of this product is 12 months from the date of production. Special attention must be paid to storing in a moisture-proof area to prevent moisture from coming into contact with this product. The container must be tightly closed to reduce the space above the liquid level in the container.

#### CAUTION

- 1. A diluent can be added for dilution, and the diluent used must not contain water, sulfur compounds, or other impurities.
- 2. Wear protective equipment such as gloves and goggles during operation
- 3. The operating area needs to be ventilated
- 4. The equipment and tools used must be clean and strictly prevent the mixing of dust and foreign objects.

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.