Sil-Pro 2570LV

One-part transparent low viscosity conformal coating without UV dye.

Product Description
Sil-Pro 2570LV is a one-part silicone resin solution used for coating rigid and flexible circuits boards in LED Lightning and Display applications. The conformal coating has firm, dry surfaces for better handling and abrasion resistance after cure. The conformal coating requires atmospheric moisture to cure (no oven) but the cure rate can be accelerated with low heat.

This product is available with a UV dye, a higher or lower viscosity, and a different color. Other variations are available by request. Please contact us to discuss your application if a modified version might be of interest.

Key Features
- Transparent with all visible wave lengths (without UV dye)
- No UV dye so eliminating fluorescence in the presence of UV energy
- Cures to a tough, elastoplastic resilient, abrasion resistant surface
- Solvent-borne resin coating
- Room temperature cure with optional heat acceleration after solvent flash-off
- Good adhesion allows use with many low-solids (no clean) and no-lead solders

Main Applications Methods
- Spray
- Brush
- Flow
- Dip
- Automated Pattern coating

Typical Properties

PROPERTIES:	
Color	Transparent
Initial Viscosity	75 cP
Specific Gravity(uncured)	1.11
Specific Gravity(cured)	1.11
Tack Free Time at 25°C	15 minutes
Tack Free Time at 60°C	1.5 minutes
Shore A Hardness	76A

TYPICAL CURED PROPERTIES (Typical cure for 3 mil coatings is 10 minutes at 25°C followed by 10 minutes at 60°C)	
Property	**Results**
Shore A Hardness	76A
Dielectric Constant at 100 Hz	2.74
Dielectric Constant at 100 kHz	2.74
Dissipation Factor at 100 Hz	0.0042
Non-Volatile Content	36 %

Note: Not for Product Specification Purposes – these are typical values. Please contact us for assistance in writing purchasing specifications.

Curing Characteristics

The curing process begins as soon as the conformal coating is exposed to atmospheric moisture. Under normal temperature (25°C) and humidity (50% RH) conditions, the material will cure as described in the data above. Because this system is sensitive to heat and humidity, a change in cure speed may be seen if one or both of these variables are altered. A large difference in temperature (+/-5°C) or humidity (>60-70%) may change the cure profile of the material. When using heat to accelerate tack-free time allow adequate time for the solvent to evaporate prior to exposing to elevated temperatures. If coating blisters or contains bubbles, allow additional time at room temperature for the solvent to flash off prior to oven cure.

SUGGESTED PROCESSING GUIDELINES

The following procedure should be followed for obtaining optimal performance from the Sil-Pro 2570LV. Before each use, stir or shake the containers of Sil-Pro 2570LV to ensure that it is uniform. Apply by brush, dipping, or spraying. If spraying, the coating may be thinned with small amounts of Ultralane Thinner #25 to produce a lower viscosity. However, the addition of Ultralane Thinner #25 will reduce the solids content and will increase the dry time.

If two or more coats are needed to be applied, allow enough time in between coats for each application to gel. Allow adequate time at room temperature for the solvent to evaporate prior to exposing to elevated temperatures.

REPAIRABILITY

It is often desirable to reclaim or salvage damaged or defective units. Sil-Pro 2570LV can be removed from substances with solvent or stripping agents and scraping or cutting. A soldering iron may be applied directly through the coating to repair a single circuit component. Ensure that there is proper ventilation and after the circuit board is repaired the area will require cleaning by brushing or solvent use. The area must then be recoated, if solvent is used give adequate time for area to dry.

Shelf-life and Storage

Sil-Pro 2570LV should be stored in their original, sealed containers at a temperature of 15°C – 35°C (59°F – 95°F). Under these conditions the expected shelf-life of the material is 24 months.

FIRST AID

In case of contact:

Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.
Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.
Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.
Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

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