



## **PRODUCT DESCRIPTION**

UV7930 provides the following product characteristics:

Technology	Urethane		
Appearance	Translucent yellow		
Components	One-component		
Product Benefits	UV and moisture curable		
	Fast cure		
	One component		
	Solvent-free		
	<ul> <li>Good moisture resistance</li> </ul>		
	<ul> <li>Excellent chemical resistance</li> </ul>		
Cure	Ultraviolet (UV)/ moisture		
Application	Conformal coating		
Operating Temperature	-40 to 105 °C		
Typical Assembly Application	Printed wire board		

UV7930 is a conformal coating designed to provide rugged protection from moisture and harsh chemicals. It is compatible with industry standard solder masks, no-clean fluxes, metalization, components and substrate materials.

# **TYPICAL PROPERTIES OF UNCURED MATERIAL**

Brookfield Viscosity, mPa·s (cP)	120
Specific Gravity	1.04
Shelf Life @ 25°C, months	6

Flash Point - See MSDS

### **TYPICAL CURING PERFORMANCE**

#### **Cure Schedule**

Temp °C	Relative Humidity, %	Cure Time, hours
25	50	100
25	>70	50





#### **Minimum UV Cure Condition**

Medium pressure mercury vapor lamp, seconds

<5

200 watts per inch

**Note:** "Shadowed" areas of the assembled board not exposed to UV light will moisture cure at ambient temperature and humidity, no further processing is necessary.

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

# **TYPICAL PROPERTIES OF CURED MATERIAL**

#### **Physical Properties:**

Modulus:	N/mm²	1,150
	(psi)	(166,650)
Hardness, Shore A		80
Hardness, Shore D		60
Tensile Strength, psi		5,005
Electrical Properties:		
Volume Resistivity, ohm/cm @ 25°C		2.2×10 <sup>16</sup>
Dielectric Strength, kV/mm		50
Dielectric Constant		3.34
Dissipation Factor		0.0131

#### **GENERAL INFORMATION**

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

### **DIRECTIONS FOR USE**

1. Surface preparation of assembled boards prior to applying UV7930 is not required.

However, improved adhesion and reliability performance can be achieved when contaminants



# UV7930

such as ionics, dust, salts and oils are cleaned from the assembled board.

2. UV7930 has been applied successfully using dip, spray, brush, and flow coating equipment.

3. Final coating thickness is influenced by board size, part geometry and application method.

4. Dip coat operations: A withdrawal rate of 5inches per minute results in a typical coating thickness of 3 mils. Time allowed for coating run-off before cure will also influence final coating thickness. Coating run-off time should be based on appropriate process factors including board size and component density.

5. Spray and flow coating operations: Solventless conformal coatings usually require modified operating procedures compared to solvent-based systems such as lower flow rate through the gun, increased atomization pressure to create a fine mist and spray gun location approximately 2 to 3 inches above the assembled board.

6. Equipment parameters such as nozzle design, nozzle orientation and number of passes will impact final coating thickness.

### Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

#### Optimal Storage: 25 °C

Avoid heat, light and moisture.

Material removed from containers may be contaminated during use. Do not return product to the original container. Longain Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

#### Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

#### Note:



# UV7930

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the 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 production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Longain Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Longain Corporation's products. Longain Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Longain Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.