

LCD 66L Optical Bonding Sealant Product Datasheet

Low Stress

High Throughput and Low Cost

Bio-compatible

Description

LCD 66L is one part 100% solid, bio-compatible UV curable optical bonding adhesives which has been designed to provide fast bonding of protective cover windows and touch screens. It can be used for LCD lamination and sealing, polarizer lamination and touch screen bonding, etc. After cure, LCD 66L not only provides bubble free optical coverage and has good moisture resistance, excellent weatherability, but also forms a very flexible bond, which can easily dissipate the thermal stress from the different CTE substrates. All data of thermal cycle and surface insulation resistance have indicated LCD 66L meets MIL-I-46058C and IPC-CC-830 standards. LCD 66L is also in full compliance with the RoSH Directive.

Typical Physical Properties

Product Name	LCD 66L optical bonding adhesives
PROPERTIES OF UNCURED MATERIAL	
Appearance	Transparent colorless liquid
Solvent (%)	0
Specific Gravity (ASTM D 1475-60)	1.02 g/cc
Viscosity (ASTM D-1384)	0.8 – 1.5 kcp
PROPERTIES OF CURED MATERIAL	
C.T. E (ASTM E 831), PPM /°C	$\alpha_1 = 75$

Durometer Hardness (ASTM D-224)	D36
Surface Insulation Resistance (IPC-J-STD-004)	Pass
Humidity Resistance (85C/95RH, 120 days) (IPC-CC-830)	Pass
Flexibility (MIL-L-46058C)	Excellent
Adhesion (ASTM D2197)	Excellent
Moisture Absorption (ASTM D-570)	0.1%
Extractable ions (MIL-STD-883E)	
Na+	<5ppm
K+	<5ppm
F-	<5ppm
Cl-	<10ppm
Thermal Performance	
Thermal Shock (-65/+125 °C) (IPC-CC-830)	100 cycles, Class 3
UV Yellowing Resistance, hrs (ASTM D904-99)	>500

Recommended Curing Conditions

LCD 66L can complete the curing in a few seconds when exposed to one 365 watts per inch 365nm UV light (“H” lamp) with light intensity 2 – 5W/cm².

Storage & Shelf Life

6 months provided materials are kept in a sealed original container at room temperature. Storage beyond this period can produce higher viscosity. Protect from UV light, moisture, evaporation

and foreign materials. Process ability of these products can be adversely affected by evaporation and contamination.

Safety

LCD 66L is a friendly, non-toxic material. However, general hygiene practice is recommended when handling this material. For detailed information, please consult the product SDS.

Package

LCD 66L conformal coating is available in 10cc and 30cc. Other packages are available depending upon customer's request. Contact YINCAE for order information.