

LEN 66AL Fast Bonding UV Adhesives Product Datasheet

Low Thermal Stress

High Throughput and Process Yield

High Reliability

Description

LEN 66AL is one part 100% solid, super-fast UV curable bonding adhesives, which has been designed for lens attachment, protective cover windows and touch screens. It can also be used for LCD lamination and sealing, polarizer lamination and touch screen bonding and so on. After cure, LEN 66AL not only provides bubble free optical coverage and has good moisture resistance, excellent weather ability, 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 LEN 66AL meets MIL-I-46058C and IPC-CC-830 standards. LEN 66AL is also in full compliance with the RoHS Directive.

Typical Physical Properties

Product Name	LEN 66AL optical bonding adhesives
PROPERTIES OF UNCURED MATERIAL	
Appearance	Transparent colorless liquid
Solvent (%)	0
Specific Gravity (ASTM D 1475-60)	1.08 g/cc
Viscosity (ASTM D-1384)	8 – 10 Kcp
PROPERTIES OF CURED MATERIAL	
C.T. E (ASTM E 831), PPM /°C	$\alpha_1 = 80$

Glass Transition Temperature (T _g) (ASTM D3418-82)	10 °C
Durometer Hardness (ASTM D-224)	D50
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

LEN 66AL 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

LEN 66AL 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

LEN 66AL optical bonding adhesive is available in 55cc and 12oz. Other packages are available depending upon customer’s request. Contact YINCAE for order information.