

WL 66H Lid Attachment Adhesives Product Datasheet

Low Temperature Cure
High Throughput and Process Yield
High reliability

Description

WL 66H is one part 100% solid, low temperature thermal cure wafer level die attach adhesives, which has been designed for wafer-level lens, optical lens and die attachment. It can be applied onto wafer using dispense or printing, and slowly cured by heat to achieve the high reliability. WL 66H not only provides bubble free coverage and has good moisture resistance, and high temperature resistance. It is fully compatible with lead-free soldering process and no delamination is observed after MSL3 treatment. All data of thermal cycle and surface insulation resistance have indicated WL 66H meets MIL-I-46058C and IPC-CC-830 standards. WL 66H is also in full compliance with the RoHS Directive.

Typical Physical Properties

Product Name	WL 66H optical lens Adhesive
PROPERTIES OF UNCURED MATERIAL	
Appearance	Transparent colorless liquid
Specific Gravity (ASTM D 1475-60)	1.09 g/cc
Viscosity	2000 – 5000 cp
Solvent (%)	0
PROPERTIES OF CURED MATERIAL	
Durometer Hardness (ASTM D – 224)	D90

Humidity Resistance (85C/95RH, 120 days) (IPC – CC – 830)	Pass
Surface Insulation Resistance (IPC – J – STD – 004)	Pass
Glass Transition Temperature (Tg) (ASTM D3418-82)	120 °C
C.T. E (ASTM E 831), PPM /°C	$\alpha 1 = 65$
Refractive Index (ASTM E 831)	1.5 – 1.52
Adhesion (ASTM D2197)	Excellent
Moisture Absorption (ASTM D – 570)	0.2%
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

Recommended Cure Process

WL 66H can complete the curing at 100°C after 1.5 – 2hrs.

Storage & Shelf Life

6 months provided materials are kept in a sealed original container at -20 °C. 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

WL 66H is a friendly, non-toxic material. However, general hygiene practice is recommended when handling this material. For detailed information please consult our SDS.

Package

WL 66H die attach adhesive is available in 55cc and 12oz. Other packages are available depending upon customer's request. Contact YINCAE for order information.