

DA 150LE Insulating Die Attach Adhesive Product Datasheet

High electrical conductivity
Excellent moisture resistance
High reliability

Description

DA 150LE is one-component, thermosetting insulating transparent die attach adhesives which has been designed for LED chip (GaN) bonding. DA 150LE has excellent adhesion, good thermal and UV resistance, as well as non-bleeding properties. It can be used for small and large die attach. It can be applied using dispense or pin transfer methods. It has demonstrated high reliability and high temperature reflow performance.

Typical Physical Properties

Product Name	DA 150LE transparent adhesives
PROPERTIES OF UNCURED MATERIAL	
Chemistry	Epoxy
Specific Gravity (ASTM D 1475-60)	1.08 g/cc
Viscosity	5000 – 10000cp
PROPERTIES OF CURED MATERIAL	
Glass Transition Temperature (T _g) (ASTM D3418-82)	>120 °C
C.T. E (ASTM E 831), PPM /°C (ASTM E 831)	65
Lap shear strength (psi)	1800

Thermal conductivity (W/mK)	> 0.4
Die Shear Strength (Kg/mm ²)	2x2mm Silicon die on Pd: 2.0 2X2mm Au silicon die on bare Cu: 2.5 2x2mm Au silicon die on Au: 2.3
Light Transmittance	> 85%
Refractive Index	1.52
Extractable ions (MIL-STD-883E)	
Na ⁺	<5ppm
K ⁺	<5ppm
F ⁻	<5ppm
Cl ⁻	<10ppm

Recommended Curing Conditions

6 – 10 min cure at 150°C.

Note: the cure time not including the time to allow the bond location to reach the desired cure temperature. Alternate cure profiles may be evaluated.

Storage & Shelf Life

6 months provided materials are kept in a sealed original container at –40 °C. Storage beyond this period can produce higher viscosity. Protect from moisture, evaporation and foreign materials. Process ability of these products can be adversely affected by evaporation and contamination.

Safety

DA 150LE 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

DA 150LE insulating adhesives are available in 10 cc and 30cc packages. Other packages are available depending upon customer's request. Contact YINCAE for order information.