

Technical Data Sheet

FeedBond® EP-1600-SL1

Anti-yellowing and anti-UV insulating adhesive

Description:

FeedBond®EP-1600-SL1 one-component, translucent epoxy resin adhesive, specially used for various optoelectronic components such as LED adhesives.

Application Package:

Chip LED, GaN LED chip, LED lamp bonding etc.

Characteristics:

- No yellowing under light and high temperature
- Middle viscosity that is adaptable to conventional processing methods such as pin transfer and dispensing.

UNCURED PROPERTIES		TEST DESCRIPTION	TEST METHOD
Appearance	Translucent		
Viscosity @ 25°C	14,000-19000cps	Brookfield DV-III/CP-51 @ 5rpm	FT-P006
Thixotropic Index @ 25°C	1.5~3.5	Brookfield DV-III/CP-51 Visc. @ 0.5rpm/Visc. @ 5rpm	FT-P008
Grind	< 10μm	Grind meter	FT-P026
Work Life @ 25°C	48hrs	25% increase in visc. @ 5rpm	FT-P024
Shelf Life@ -40°C	6months		FT-P018
CURE CONDITION		TEST DESCRIPTION	TEST METHOD
Standard Cure Condition		40 minutes in oven @160°C(Oven)	

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PHYSIOCHEMICAL PROPERTIES	TEST DESCRIPTION	TEST METHOD
Glass Transition Temperature (Tg) 144°C	DMA 3 Point Bending Mode	FT-M014
Coefficient of Thermal Expansion		
Below Tg(α 1) 70ppm/°C	TMA Expansion Mode	FT-M016
Above Tg(α 2) 130ppm/°C		
Dynamic Tensile Modulus		
@25°C 2578MPa	Dynamic Mechanical Thermal Analysis using <1.6 mm thick specimen	FT-M019A
@150°C 290MPa		
@250°C 216MPa		
MECHANICAL PROPERTIES-POST CURE	TEST DESCRIPTION	TEST METHOD
Die Shear Strength @ 25°C > 3Kg/die	45mil × 45mil die on Ag Leadframe	FT-M012

Instruction

Thawing

Place the container to stand vertically for 60mins.**DO NOT** open the container before adhesive reaches ambient temperature to prevent the moisture condensation. Any moisture that collects on the thawed container should be removed prior to use. Adhesives that appear to have separated should not be used.

Storage

Adhesive should be stored @ -40°C. The shelf life of the material is only valid when the material has been stored at the correct storage condition.

Availability

FeedBond® adhesives are packaged in syringes or pots per customer specification. For the details, please contact our Customer Service or sales department.

Storage Temp.	-22°C~-18°C	0°C~5°C	18°C~28°C
Shelf Life	6months	3months	2 days