

Technical Data Sheet

EP-2005

Insulated Die Attach Adhesive

Introduction:

EP-2005 is an epoxy type adhesive designed for die-attach applications, it can be applied for BGA and lead frame packages. It can be fast cured, minimum bleeding, and shows good flexibility and adhesion on different substrates.

Characteristics:

- Excellent dispensability with minimal tailing and stringing
- Minimal bleeding and minimal volatiles
- Low Stress
- Improve JEDEC performance
- REACH ,RoHS and PFAS Compliance

UNCURED PROPERTIES		TEST DESCRIPTION	TEST METHOD
Density	1.4 g/cc	Pycnometer	FT-P001
Appearance	Red		
Viscosity @ 25°C	8500cps	Brookfield DV-III/CP-51 @ 5rpm	FT-P006
Thixotropic Index @ 25°C	4.9	Brookfield DV-III/CP-51 Visc. @ 0.5rpm/Visc @ 5rpm	FT-P008
Work Life @ 25°C	48 hours	25% increase in visc. @ 5rpm	FT-P024
Shelf Life@ -40°C	6 month		FT-P018
CURE CONDITION		TEST DESCRIPTION	TEST METHOD
Standard Cure Condition		60 minutes in oven @150°C or 30 minutes in oven @175°C	
Thermal Conductivity 0.28 W / m °K		Hot Disk	FT-P022
MECHANICAL PROPERTIES- POST CURE		TEST DESCRIPTION	TEST METHOD
Die Shear Strength @ 25°C \geq 8.0 kg/die		2mmx2mm Si die on Ag/Cu LF (80milx80 mil)	FT-M012
Die Shear Strength @ 260°C \geq 1.0 kg/die		2mmx2mm Si die on Ag/Cu LF (80milx80 mil)	FT-M012

The tables shown above are typical values only. If you need to write a specification, please request our current Standard Release Specification.

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PHYSIOCHEMICAL PROPERTIES- POST CURE	TEST DESCRIPTION	TEST METHOD
Glass Transition Temperature 47°C	DMA 3 Point Bending Mode	FT-M014
Coefficient of Thermal Expansion	TMA Expansion Mode	FT-M016
Below Tg 50 ppm/°C Above Tg 155 ppm/°C		
Dynamic Tensile Modulus	Dynamic Mechanical Thermal	FT-M019
@ -60°C 4532 MPa @25°C 1694 MPa @150°C 101 MPa @250°C 107 MPa	Analysis using <1.6 mm thick Specimen	

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Instruction**Thawing**

Place the container to stand vertically for 30min ~90min.**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.

Note

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentation. It is not intended, however, to substitute for any testing you may need to conduct and to determine the suitability of our products by yourself for your particular purposes. This information may be subject to revision as new knowledge and experience become available. Since we cannot anticipate all variations in actual end-use conditions, Feedpool makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.