

Technical Data Sheet

FP-8000-P2

Electrically Conductive Die Attach Adhesive

Introduction:

FP-8000-P2 is single component type silver filled acrylate based paste for die attaching IC, LSI package which require very high reliabilities.

Characteristics:

- Voidless
- Good adhesive strength

UNCURED PROPERTIES		TEST DESCRIPTION	TEST METHOD
Appearance	Silver		
Viscosity @ 25°C	8500cps	Brookfield DV-III/CP-51 @ 5rpm	FT-P006
Thixotropic Index @ 25°C	4.5	Brookfield DV-III/CP-51 Visc. @ 0.5rpm/Visc @ 5rpm	FT-P008
Work Life @ 25°C	24 hours	25% increase in visc. @ 5rpm	FT-P024
Shelf Life@ -40°C	12 month		FT-P018
CURE CONDITION		TEST DESCRIPTION	TEST METHOD
Standard Cure Condition		5°C/min ramp to 175°C + 60 minutes @ 175°C	
MECHANICAL PROPERTIES- POST CURE		TEST DESCRIPTION	TEST METHOD
Die Shear Strength @ 25°C	12.0kg/die	2mm×2mm Si die on Ag/Cu LF (80mil×80 mil)	FT-M012
Die Shear Strength @ 250°C	2.5kg/die		
Die Shear Strength @ 25°C	12.0kg/die	2mm×2mm Si die on Pd/Ni/Cu LF (80mil×80 mil)	FT-M012
Die Shear Strength @ 250°C	2.3kg/die		
Die Shear Strength @ 25°C	15.0kg/die	2mm×2mm Si die on Bare Cu LF (80mil×80 mil)	FT-M012
Die Shear Strength @ 250°C	2.6kg/die		

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	48°C	DMA Tension Mode	FT-M019A
Coefficient of Thermal Expansion		TMA Expansion Mode	FT-M016
Below Tg	83 ppm/°C		
Above Tg	192 ppm/°C		
Dynamic Tensile Modulus		Dynamic Mechanical Thermal Analysis(TA) using <1.6mm thick specimen	FT-M019A
@-65°C	2336MPa		
@25°C	1432MPa		
@150°C	260MPa		
@250°C	160MPa		
Weight loss	0.4% @300°C	Thermogravimetric Analysis	FT-P010
Ionic Content		Teflon flask, 20~40 mesh, 5g sample in 50g DI water, 24hr@100°C	FTC-021
Cl-	<20 ppm		
Na+	<10 ppm		
K+	<10ppm		
Moisture Absorption @saturation	0.3%	Dynamic vapor sorption afte 85 °C /85% RH exposure	FT-P032
THERMAL ELECTRICAL PROPERTIES- POST CURE		TEST DESCRIPTION	TEST METHOD
Thermal Conductivity@ 25°C	2.0 W/m · K	HOT DISK Tester	FT-P022
Volume resistivity	0.005 ohm-cm	4-Point Probe	FT-P017

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.