



Technical Data Sheet

EP-2101-7A

B-Stage Adhesive

Introduction:

EP-2101-7A is designed for use in laminate-based packages and stencil printing. This material is ideal for chip scale packages where tolerance and bleed need to be minimized. EP-2101-7A is a low modulus adhesive ideal for large die sizes.

Features

- Stencil printing
- Low moisture uptake
- Low warpage

UNCURED PROPERTIES		TEST DESCRIPTION	TEST METHOD
Density	1.4 g/cc	Pycnometer	FT-P001
Appearance	yellow		
Viscosity @ 25°C	26024cps	Brookfield DV-III/CP-51 @ 5rpm	FT-P006
Thixotropic Index @ 25°C	2.71	Brookfield DV-III/CP-51 Visc @ 0.5rpm/Visc @ 5rpm	FT-P008
Grind	<20µm	Grindmeter	FT-P025
Work Life of B-Stage @ 25°C	7 days	25% increase in visc. @ 5rpm	FT-P024
Shelf Life @ -40°C	12 months		FT-P018
CURE CONDITION		TEST DESCRIPTION	TEST METHOD
B-stage Cure Condition		ramp to 100°C+ 30min@100°C	
C-stage Cure Condition		ramp to 125°C+30min@125°C +30min@150°C+60min@175°C	
MECHANICAL PROPERTIES- POST CURE		TEST DESCRIPTION	TEST METHOD
Die Shear Strength @ 25°C	8.5 Kg/die	2×2mm Si die on Microscope Slide Glass	FT-M012
Die Shear Strength @240°C	2.1 Kg/die	2×2mm Si die on Microscope Slide Glass	FT-M012

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



EP-2101-7A B-stage Adhesive

PHYSIOCHEMICAL PROPERTIES- POST CURE			TEST DESCRIPTION	TEST METHOD
Glass Transition Temperature	57°C		DMA 3 Point Bending Mode	FT-M014
Coefficient of Thermal Expansion			TMA Expansion Mode	FT-M016
	Below Tg	40 ppm/°C		
	Above Tg	83 ppm/°C		
Dynamic Tensile Modulus			Dynamic Mechanical Thermal	FT-M019
	@ -60°C	4213 MPa	Analysis using <1.5 mm thick	
			Specimen	
	@25°C	2512 MPa		
	@150°C	70 MPa		
	@250°C	56 MPa		
Ionics	Cl ⁻	5.86 ppm	Teflon flask, 5 g sample in 50g DI water, 24 hrs @100°C	FT-C021
	Na ⁺	1.58 ppm		
	K ⁺	1.75 ppm		
	NH ₄ ⁺	Not detected		

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