

# Hybrid Plastics®

Superior Technology for Superior Products

## POSS® Bond EP3112

EP3112 is a POSS® enhanced **room temperature curable** epoxy adhesive with good resistance to oxidation, moisture and corrosion. It shares the same chemical composition with EP3110 but is cured with aliphatic amines. EP3112 is recommended for applications requiring room temperature cure and robust resistance to environmental damages.

### KEY PERFORMANCE

- Suitable for room temperature resin transfer molding
- Good oxidation resistance
- Low viscosity, easy handling
- Good mechanical performance

### PHYSICAL PROPERTIES

POSS content:	10 - 40%
Density (after cure):	1.2 g/mL
Pot life:	1 - 2 hours
Viscosity (after mixing):	< 5 Poise
Flexural Modulus:	3 - 3.5 GPa
CTE:	100 ppm/°C
Lap Shear (Al/Al; MEK/Etch):	2500 psi
Appearance after hardening:	clear solid
Shore D Hardness:	85

### RECOMMENDED CURE PROCEDURE

- (1) Store resin/hardener at room temperature
- (2) Thoroughly mix Part A with Part B (6:1 ratio in weight percentage)
- (3) The part reaches handling strength after sitting at room temperature for 4 - 6 hours
- (4) > 80% of the mechanical strength is achieved after being cured for 1 day
- (5) Ultimate strength is achieved after 1 week at room temperature

### WARRANTY

The information contained herein is believed to be accurate and reliable. However, the user is responsible for determining the suitability and use of the final formulations/products. Hybrid Plastics warrants that its products will meet specifications, but not merchantability or fitness for use.

Hybrid Plastics, Inc. • 55 WL Runnels Industrial Drive • Hattiesburg, MS 39401 • USA

Telephone: 601-544-3466 • Facsimile: 601-545-3103

[www.hybridplastics.com](http://www.hybridplastics.com)