

Hybrid Plastics®

Superior Technology for Superior Products

POSS® Bond EP3110

EP3110 is a POSS® based, high-temperature epoxy adhesive with outstanding resistance to ozone, plasma, or atomic oxygen environments. Major applications include medical devices, optics, semiconductors and electronics.

KEY PERFORMANCE

- Exceptional oxidation resistance
- Low viscosity, easy handling
- Transparent
- Very low outgassing and VOC

PHYSICAL PROPERTIES

POSS content:	10-40%
Density (after cure):	1.2 g/mL
Pot life:	3 hours
Glass Transition:	105°C
Viscosity (after mixing):	< 50 Poise
Flexural Modulus:	3-3.5 GPa
CTE:	100 ppm/°C
Hardness (shore D):	86
Lap Shear (Al/Al; MEK/Etch):	2750 psi
Appearance after hardening:	clear amber solid



Control

After treatment

Less than 5% weight loss after intensive ozone treatment

RECOMMENDED CURE PROCEDURE

- (1) Store resin/hardener at room temperature
- (2) Thoroughly mix Part A with Part B (20:1, ratio by weight)
- (3) Cure at 80 °C for 60 minutes
- (4) Post-cure at 100 °C for 60 minutes
- (5) Slowly cool the part down to 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.