

Hybrid Plastics®

Superior Technology for Superior Products

POSS® Bond EP3530

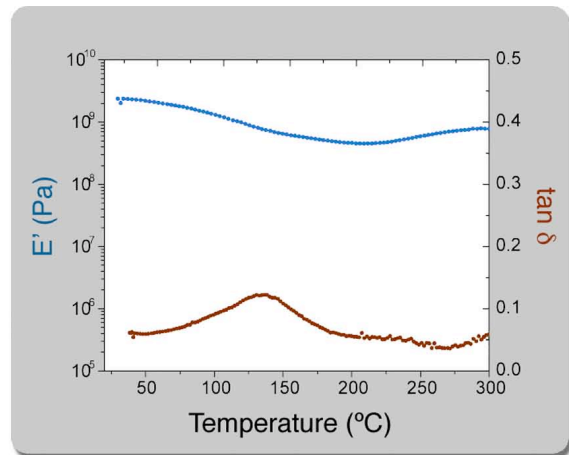
EP3530 is a POSS® enhanced high-temperature epoxy adhesive. The POSS® content in EP3530 offers unique properties such as high thermal stability, outstanding oxygen and chemical resistance. EP3530 has long pot life even at elevated temperatures, which makes it suitable for parts requiring long handling time. Major applications include composites, medical devices, and electronics.

KEY PERFORMANCE

- Very good strength even at high temperatures (> 250°C)
- High degradation temperature (> 325°C)
- Very low outgassing and VOC
- Excellent adhesion to glass fiber and carbon fiber

PHYSICAL PROPERTIES

Composition:	POSS® epoxide TEPA
Density (after cure):	~1.2 g/mL
Pot life:	> 3 hours at 80°C
Viscosity (after mixing):	< 10 Poise at 80°C
Young's Modulus:	2.5-3.0 GPa
Appearance before hardening:	Clear viscous liquid
Appearance after hardening:	Clear yellowish solid
Hardness (shore D):	87
Shelf Life:	6 months at room temperature; 1 year if refrigerated.



Dynamic Mechanical Analysis

RECOMMENDED CURE PROCEDURE

- (1) Store resin/hardener at room temperature
- (2) Warm Part A (resin) up to 60-80°C for better handling
- (3) Thoroughly mix Part A with Part B (5:1 by weight)
- (4) Begin molding or infusion
- (5) Cure at 100°C for 1 hour
- (6) Cure at 120°C for 1 hour
- (7) Post-cure at 150°C for 1 hour.
- (8) 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.