

## Master Bond Supreme 45HTND Toughened Epoxy for Structural Bonding

Category : Polymer , Adhesive , Thermoset , Epoxy , Epoxy Adhesive

### Material Notes:

**Description:** Master Bond Polymer Adhesive SUPREME 45HTND is a two component epoxy adhesive featuring a balance of shear and peel strengths for high performance structural bonding suitable for applications where long term exposure to temperatures from -78°to +450°F (-55°to+228°C) is required. It is 100% reactive and does not contain any solvents or diluents. It is formulated to cure rapidly at elevated temperatures with a 100 to 30 mix ratio, by weight, to produce high bonding strengths at both ambient and elevated temperatures which unlike that of many other epoxy adhesives, are relatively insensitive to small changes in the mix ratio or substrate cleaning procedures. Master Bond Polymer Adhesive SUPREME 45HTND can be applied without sagging or dripping on vertical surfaces. It produces durable high strength and tough bonds which are resistant to thermal cycling and chemicals including water, oil and most organic solvents over the wide temperature range of -80°F to more than +450°F. Adhesion to metals, glass, ceramics, wood, vulcanized rubber and many plastics is excellent. The hardened adhesive is an electrical insulator, Color of Part A is gray, part B is clear brown. Master Bond Polymer Adhesive SUPREME 45HTND is widely used in aerospace, electronic, electrical, computer, construction, metal working, appliance, automotive and chemical industries. **Product Advantages:** Convenient mixing: product properties relatively unaffected by small changes in mix ratio Surface cleanliness not critical for good bonding in many uses but needed for optimal strength Easy application contact pressure only required for cure, adhesive spreads evenly and smoothly; no drip application feature Convenient cure schedules: long pot life at room temperature and fast elevated temperature cures as required High bonding strength to similar and dissimilar substrates with superior peel strength Superior durability, thermal shock and chemical resistance 100% reactive and does not contain any solvents or diluents Resists ETO sterilization Information provided by MasterBond®

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Master-Bond-Supreme-45HTND-Toughened-Epoxy-for-Structural-Bonding.php](http://www.lookpolymers.com/polymer_Master-Bond-Supreme-45HTND-Toughened-Epoxy-for-Structural-Bonding.php)

Mechanical Properties	Metric	English	Comments
Shear Strength	>= 15.9 MPa	>= 2300 psi	Bond, Al to Al, after 30 days water immersion
	>= 17.2 MPa	>= 2500 psi	Bond, Al to Al
Peel Strength	>= 2.10 kN/m	>= 12.0 pli	

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	232 °C	450 °F	
Minimum Service Temperature, Air	-62.2 °C	-80.0 °F	

Processing Properties	Metric	English	Comments
Cure Time	120 - 180 min	2.00 - 3.00 hour	
	@Temperature 135 - 163 °C	@Temperature 275 - 325 °F	
Pot Life	>= 720 min	>= 720 min	200 gram mass

Processing Properties	Metric <sup>min</sup>	English <sup>min</sup>	Comments <sup>s</sup>
Shelf Life	12.0 Month @Temperature 23.9 °C	12.0 Month @Temperature 75.0 °F	

Descriptive Properties	Value	Comments
Mixing Ratio (A to B)	100/30	by weight

## Contact Songhan Plastic Technology Co.,Ltd.

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