

## Master Bond EP3HTS Silver Filled, Electrically Conductive Epoxy

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

### Material Notes:

**Description:** Master Bond Polymer System EP3HTS is a one component, silver filled, electrically conductive epoxy system featuring high shear strength and good temperature resistance along with a fast cure schedule. EP3HTS has conductivity; less than 1 millionth per cm. Typical curing schedules are 40-90 minutes at 250°F or 20-40 minutes at 300°F (minimum cure temperature is 235°F-240°F). Tensile shear strengths in excess of 1,000 psi are readily obtained using these fast cure times. EP3HTS requires no mixing prior to use and has a 6 month shelf life at room temperature when packaged in jars (syringes have a shelf life of 3 months). The service temperature range is -60°F to +400°F. It is 100% reactive and does not contain any solvents or volatiles. Master Bond EP3HTS produces durable, high strength bonds which are resistant to severe thermal cycling and many chemicals including water, oil, fuels and most organic solvents. Its adhesion to metals, glass, ceramics, vulcanized rubbers and many plastics is excellent. The cured adhesive/sealant is a superior thermal and electrical conductor. Its color is silver. The convenient handling and rapid cure speed of EP3HTS makes it ideally suited for demanding manufacturing applications. **Product Advantages:** Single component system; no mixing prior to use. Easy application; contact pressure only required during simple heat cure; adhesive spreads evenly and smoothly. Rapid cure schedules, e.g. 20-40 minutes at 300°F or 40-90 minutes at 250°F. High tensile shear strength. Bonds well to a wide variety of substrates. Broad service temperature range of -60°F to +400°F . Excellent thermal and electrical conductor. Ideal for rigorous manufacturing application. Information provided by MasterBond®

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Master-Bond-EP3HTS-Silver-Filled-Electrically-Conductive-Epoxy.php](http://www.lookpolymers.com/polymer_Master-Bond-EP3HTS-Silver-Filled-Electrically-Conductive-Epoxy.php)

Physical Properties	Metric	English	Comments
Specific Gravity	2.90 g/cc	2.90 g/cc	
Solids Content	100 %	100 %	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	60 - 80	60 - 80	
Tensile Strength at Break	>= 34.5 MPa	>= 5000 psi	
Shear Strength	>= 3.45 MPa	>= 500 psi	Tensile, Al to Al
	@Temperature 93.3 °C	@Temperature 200 °F	
	>= 6.89 MPa	>= 1000 psi	Tensile, Al to Al
	@Temperature 23.9 °C	@Temperature 75.0 °F	

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	204 °C	400 °F	
Minimum Service Temperature, Air	-51.1 °C	-60.0 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	<= 0.0010 ohm-cm	<= 0.0010 ohm-cm	

Processing Properties	Metric	English	Comments
Cure Time	20.000 - 40.000 min	0.33333 - 0.66666 hour	
	@Temperature 149 °C	@Temperature 300 °F	
	40.000 - 90.0 min	0.66666 - 1.50 hour	
	@Temperature 121 °C	@Temperature 250 °F	

Descriptive Properties	Value	Comments
Appearance	silver	

## Contact Songhan Plastic Technology Co.,Ltd.

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