

## Master Bond EP46HT-2Med Two Component Heat Resistant Biocompatible Epoxy System

Category : Polymer , Thermoset , Epoxy , Epoxy, Cast, Unreinforced , Epoxy, High Temperature

### Material Notes:

Master Bond Polymer System EP46HT-2MED is a two component medical grade epoxy system for high performance structural bonding and casting suitable for applications where resistance to temperatures from -100°F to +500°F is required. It is 100% reactive and does not contain any solvents or diluents. It is formulated to cure rapidly at elevated temperatures. The cured epoxy produces bonds, seals and small castings with high mechanical strength and excellent chemical resistance. It is resistant to radiation, chemical sterilants and repeated autoclaving.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Master-Bond-EP46HT-2Med-Two-Component-Heat-Resistant-Biocompatible-Epoxy-System.php](http://www.lookpolymers.com/polymer_Master-Bond-EP46HT-2Med-Two-Component-Heat-Resistant-Biocompatible-Epoxy-System.php)

Physical Properties	Metric	English	Comments
Water Absorption	<= 10 %	<= 10 %	30 days immersion at 75°F
Viscosity	14000 - 18000 cP	14000 - 18000 cP	Mixed system

Mechanical Properties	Metric	English	Comments
Tensile Strength	>= 68.9 MPa	>= 10000 psi	
Elongation at Break	1.0 - 2.0 %	1.0 - 2.0 %	
Tensile Modulus	>= 2.76 GPa	>= 400 ksi	
Compressive Strength	>= 165 MPa	>= 24000 psi	

Thermal Properties	Metric	English	Comments
CTE, linear	40.0 - 45.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	22.2 - 25.0 $\mu\text{in}/\text{in}\cdot\text{°F}$	
Maximum Service Temperature, Air	260 °C	500 °F	
Minimum Service Temperature, Air	-73.3 °C	-100 °F	
Glass Transition Temp, Tg	>= 220 °C	>= 428 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+16 ohm-cm	>= 1.00e+16 ohm-cm	
Dielectric Strength	17.1 kV/mm @Thickness 3.17 mm	435 kV/in @Thickness 0.125 in	

Processing Properties	Metric	English	Comments
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Processing Properties	Metric 80 min	English 00 hour	Comments
Cure Time	@Temperature 177 - 204 °C	@Temperature 350 - 400 °F	Post cure recommended for optimum properties
	180 - 240 min	3.00 - 4.00 hour	
	@Temperature 121 - 149 °C	@Temperature 250 - 300 °F	
Pot Life	>= 1440 min	>= 1440 min	100 gram batch
Shelf Life	6.00 Month	6.00 Month	

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

## Contact Songhan Plastic Technology Co.,Ltd.

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