

## Master Bond EP42HT-2ND-2Med Heat Resistant, Medical Grade Non-Drip Epoxy

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

### Material Notes:

Master Bond Polymer System EP42HT-2ND2MED (Black) is a room temperature curable two component epoxy adhesive and sealant featuring high temperature resistance along with outstanding chemical resistance. It is widely used in medical devices because of its capability of withstanding repeated sterilizations, including radiation, ethylene oxide, chemical sterilants, and steam. In addition, it fully complies with the testing requirements of USP Class VI plastics. It has a paste consistency with minimal flow when applied. Its color is black. EP42HT-2ND2MED (Black) cures readily at ambient or more quickly at elevated temperatures.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Master-Bond-EP42HT-2ND-2Med-Heat-Resistant-Medical-Grade-Non-Drip-Epoxy.php](http://www.lookpolymers.com/polymer_Master-Bond-EP42HT-2ND-2Med-Heat-Resistant-Medical-Grade-Non-Drip-Epoxy.php)

Physical Properties	Metric	English	Comments
Viscosity	>= 200000 cP	>= 200000 cP	Part B
	>= 1.00e+6 cP	>= 1.00e+6 cP	Part A

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	>= 75	>= 75	
Tensile Strength	>= 82.7 MPa	>= 12000 psi	
Elongation at Break	<= 3.0 %	<= 3.0 %	
Tensile Modulus	>= 3.10 GPa	>= 450 ksi	
Shear Strength	>= 13.8 MPa	>= 2000 psi	Tensile lap, Al/Al

Thermal Properties	Metric	English	Comments
CTE, linear	35.0 - 40.0 $\mu\text{m}/\text{m}\cdot\text{C}$	19.4 - 22.2 $\mu\text{in}/\text{in}\cdot\text{F}$	
Maximum Service Temperature, Air	232 $^{\circ}\text{C}$	450 $^{\circ}\text{F}$	
Minimum Service Temperature, Air	-51.1 $^{\circ}\text{C}$	-60.0 $^{\circ}\text{F}$	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+12 ohm-cm	>= 1.00e+12 ohm-cm	
Dielectric Constant	3.8	3.8	
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	

Processing Properties	Metric	English	Comments
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Processing Properties	Metric 80 min	English 00 hour	Comments
Cure Time	@Temperature 93.3 °C	@Temperature 200 °F	
	2880 - 4320 min	48.0 - 72.0 hour	
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Pot Life	30 - 45 min	30 - 45 min	100 gram batch
Shelf Life	6.00 Month	6.00 Month	Medical grade

Descriptive Properties	Value	Comments
Mixing Ratio (A to B)	100/40	by weight, Part A to Part B
	100/50	by volume, Part A to Part B

## Contact Songhan Plastic Technology Co.,Ltd.

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