Master Bond EP42HT-2 Epoxy Adhesive Resists Sterilization

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

Material Notes:

Description: Master Bond Polymer System EP42HT-2 is a room temperature curable, two component epoxy adhesive, sealant, coating and casting material featuring high temperature resistance along with outstanding chemical resistance. While EP42HT-2 is a superior adhesive, sealant and coating, it is also relatively low in exotherm and castable up to 2-3 inches thick. EP42HT-2 cures readily at ambient temperatures or more quickly at elevated temperatures. A desirable cure schedule to optimize its properties is overnight at room temperature followed by 2-4 hours at 150-200°F. EP42HT-2 has an easy to use 100 to 40 mix ratio by weight or 100 to 50 by volume. It is resistant to a wide variety of acids, bases, solvents, fuels, oils and salts. It also has excellent electrical insulation properties. Its service temperature range is from -60°F to 450°F. EP42HT-2 is used in electronic, electrical, fiber-optic, optical and OEM type applications. The color of Part A is clear and Part B is amber. The system has superior optical transmission properties, particularly in thinner sections, as well as a high index of refraction for an epoxy. Product Advantages: Non-critical 100 to 40 mix ratio by weight or 100 to 50 by volume Easy application: only contact pressure required while curing; adhesive spreads readily Excellent chemical resistance to acids, alkalis and many solvents Castable up to thicknesses of 2-3 inches Outstanding physical strength properties Superior optical transmission properties Contains no solventsKey Features Heat, chemical and steam resistance Cures at ambient or elevated temperatures Can be used for bonding, sealing, coating, casting & potting applications Serviceable from -60°F to 450°FInformation provided by MasterBond®

Order this product through the following link:
http://www.lookpolymers.com/polymer_Master-Bond-EP42HT-2-Epoxy-Adhesive-Resists-Sterilization.php

Physical Properties	Metric	English	Comments
Viscosity	30 - 70 cP @Temperature 23.9 °C	30 - 70 cP @Temperature 75.0 °F	Part B
	1000 - 1800 cP @Temperature 52.2 °C	1000 - 1800 cP @Temperature 126 °F	Part A
	55000 - 110000 cP @Temperature 23.9 °C	55000 - 110000 cP @Temperature 75.0 °F	Part A

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	>= 75	>= 75	
Tensile Strength at Break	>= 82.7 MPa	>= 12000 psi	
Elongation at Break	<= 5.0 %	<= 5.0 %	
Tensile Modulus	2.41 - 2.76 GPa	350 - 400 ksi	
Shear Strength	>= 13.8 MPa	>= 2000 psi	Tensile lap, Al to Al

Thermal Properties	Metric	English	Comments

Thermal Properties	Metric	English	Comments
CTE, linear	35.0 - 40.0 µm/m-°C	19.4 - 22.2 µin/in-°F	
Maximum Service Temperature, Air	232 °C	450 °F	
Minimum Service Temperature, Air	-51.1 °C	-60.0 °F	

Optical Properties	Metric	English	Comments
Refractive Index	1.63	1.63	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+14 ohm-cm	>= 1.00e+14 ohm-cm	
Dielectric Constant	3.8 @Frequency 60.0 Hz, Temperature 25.0 °C	3.8 @Frequency 60.0 Hz, Temperature 77.0 °F	

Processing Properties	Metric	English	Comments
Cure Time	120 - 180 min @Temperature 93.3 °C	2.00 - 3.00 hour @Temperature 200 °F	
	2880 - 4320 min @Temperature 23.9 °C	48.0 - 72.0 hour @Temperature 75.0 °F	
Pot Life	45 - 75 min	45 - 75 min	100 gram batch
Shelf Life	12.0 Month @Temperature 23.9 °C	12.0 Month @Temperature 75.0 °F	in original unopened container

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

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China