Master Bond Supreme 33 High Temperature Resistant, Structural Adhesive

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

Material Notes:

Description: Master Bond Polymer System Supreme 33 is a unique, room temperature curing, toughened epoxy adhesive/sealant, offering high temperature resistance. This innovative system offers high bond strength, shear and peel, along with sealing properties for service from -80°F to +425°F. It has a convenient mix ratio of 100:70 by weight or 1:1 by volume along with a moderate working life. This toughened system has good impact, thermal shock and resistance to thermal cycling. It is 100% reactive and contains no solvents or diluents. A non-drip version called Supreme 33ND is also available. Supreme 33 produces durable, high strength, and tough bonds which are remarkably resistant to thermal cycling and chemicals including water, oil and many organic solvents. Its adhesion to metals, glass, ceramics, wood, vulcanized rubbers and many plastics is excellent. The hardened adhesive is a superb electrical insulator. Color of the Part A is amber, the Part B is brown. Supreme 33 offers the convenience of a room temperature cure with high temperature resistance. It is widely used in the electronic, electrical, aerospace and OEM type industries. Supreme 33 will cure at room temperature although to optimize properties, the best cure schedule is overnight at room temperature followed by a few hours at 150-200°F. In addition, the Supreme 33 has exceptionally good dimensional stability and very low shrinkage upon cure. Product Advantages: Convenient mixing: non-critical mix ratio (100:70) by weight or 1:1 by volume Easy application: contact pressure only required for cure: adhesive spreads evenly and smoothly Versatile cure schedules: ambient temperature cure or fast elevated temperature cures as required High bonding strength to similar and dissimilar substrates from -80°F to +425°F Good durability, dimensional stability, thermal shock and chemical resistance Excellent thermal cycling capabilities Good retention of strength at high temperature.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Master-Bond-Supreme-33-High-Temperature-Resistant-Structural-Adhesive.php

Physical Properties	Metric	English	Comments
Viscosity	3000 - 5000 cP	3000 - 5000 cP	Part B
	40000 - 70000 cP	40000 - 70000 cP	Part A

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	>= 75	>= 75	
Tensile Strength at Break	>= 51.7 MPa	>= 7500 psi	
Shear Strength	>= 10.3 MPa	>= 1500 psi	Bond, Al to Al, After 30 days at 400°F
	>= 17.2 MPa	>= 2500 psi	
Peel Strength	>= 2.63 kN/m	>= 15.0 pli	T-peel, Al to Al

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	218 °C	425 °F	
Minimum Service Temperature, Air	-62.2 °C	-80.0 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+14 ohm-cm	>= 1.00e+14 ohm-cm	
Dielectric Constant	3.8	3.8	
Dielectric Strength	>= 15.7 kV/mm @Thickness 3.17 mm	>= 400 kV/in @Thickness 0.125 in	

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	60 - 90 min	60 - 90 min	100 gram mass
Shelf Life	12.0 Month @Temperature 23.9 °C	12.0 Month @Temperature 75.0 °F	unopened containers

Descriptive Properties	Value	Comments
Mixing Ratio (A to B)	100/70	

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