Master Bond EP21ANHT Two Component, Room Temperature Curing Epoxy Adhesive

Category : Polymer , Thermoset , Epoxy , Epoxy Encapsulant, Unreinforced

Material Notes:

Product Description: Master Bond Polymer Adhesive EP21ANHT is a two component room temperature curing adhesive, sealant and coating that combines high thermal conductivity and electrical insulation properties, along with elevated temperature resistance. It has a forgiving one to one mix ratio by weight or volume. Although the system cures at room temperature, its physical properties are optimized by a post cure at 150°F for 2-3 hours. EP21ANHT adheres well to a wide variety of substrates including metals glass and many plastics. Its tensile shear strength exceeds 1,100 psi, enabling it to be used in many applications where high strength bonds are required. Other features include superior dimensional stability and a long working life. EP21ANHT offers good resistance to a wide range of chemicals including water, oil, fuels, and various solvents over the temperature range of -60°F to +400°F. The color of Part A is light gray; Part B is gray in color. EP21ANHT is widely used in electronic, electrooptical and related industries where excellent heat transfer and electrical insulation are required. Product Advantages: Convenient mixing: non-critical equal weight or volume ratio. Long working life. Easy application: contact pressure only required for cure; adhesive spreads evenly.Low coefficient of expansion, low shrinkage, superb dimensional stability. Versatile cure schedules: ambient temperature cures or fast elevated temperature cures as required. High bonding strength to a wide variety of substrates. Good durability, thermal shock and chemical resistance. Great thermal conductivity; excellent electrical insulation properties.Information provided by MasterBond®

Order this product through the following link:
http://www.lookpolymers.com/polymer_Master-Bond-EP21ANHT-Two-Component-Room-Temperature-Curing-Epoxy-Adhesive.php

Physical Properties	Metric	English	Comments
Viscosity	50000 - 110000 cP	50000 - 110000 cP	Part B
	200000 - 600000 cP	200000 - 600000 cP	Part A

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	>= 85	>= 85	
Tensile Strength at Break	34.5 MPa @Temperature 23.9 °C	5000 psi @Temperature 75.0 °F	
Tensile Modulus	>= 3.45 GPa @Temperature 23.9 °C	>= 500 ksi @Temperature 75.0 °F	
Shear Strength	>= 7.58 MPa	>= 1100 psi	Al/Al, tensile

Thermal Properties	Metric	English	Comments
CTE, linear	22.0 - 25.0 µm/m-°C	12.2 - 13.9 µin/in-°F	
Thermal Conductivity	3.17 - 3.46 W/m-K	22.0 - 24.0 BTU-in/hr-ft²-°F	

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

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+13 ohm-cm	>= 1.00e+13 ohm-cm	
Dielectric Constant	4.9 @Frequency 60.0 Hz, Temperature 25.0 °C	4.9 @Frequency 60.0 Hz, Temperature 77.0 °F	
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	>= 90 min	>= 90 min	100 gram mass
Shelf Life	6.00 Month @Temperature 23.9 °C	6.00 Month @Temperature 75.0 °F	in original, unopened containers

Descriptive Properties	Value	Comments
Mixing Ratio (A to B)	1:1	by weight or 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