

Master Bond EP65HT Fast Setting Epoxy Resists High Temperatures

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

Material Notes:

Description: Master Bond EP65HT represents a highly innovative advance in epoxy technology in that it features the unusual combination of very fast cures and high temperature resistance. While typical fast setting epoxies normally possess glass transition temperatures (Tg) below 85°C, EP65HT has an exceptional Tg of approximately 130-135°C. In addition, unlike typical fast cure epoxies, EP65HT retains fast setup times even when mixed in relatively small masses. EP65HT normally will setup in 8-14 minutes in 10-20 gram masses. A full cure normally occurs within a few hours with exceptionally high tensile shear strengths of over 2,500 psi. This system offers good physical properties, including low shrinkage upon cure, excellent dimensional stability, high modulus and tensile strength. The service temperature range is -60°F to +400°F. EP65HT offers great electrical insulation properties and a strong chemical resistance profile. EP65HT bonds well to a wide variety of substrates including metals, glass, ceramics, vulcanized rubbers and many plastics. Dispensing EP65HT has been tremendously facilitated by the development of a dispensing gun capable of mixing fast setting materials with a ten to one mix ratio. This system is 100% reactive and does not contain any solvents or other volatiles. Part A is clear, and Part B is dark brown in color. It is widely used for both manufacturing and prototyping in the aerospace, electronic, computer, optical, automotive and fiber-optic industries as well as OEM applications pertaining to vacuums and clean rooms.

Product Advantages: Very fast setting and curing even in small masses; short fixturing time. Exceptionally high heat resistance. Good physical strength properties especially bonding strength. Good electrical insulation properties. Excellent environmental and chemical resistance profile. Available with convenient dispensing gun.

Information provided by MasterBond®

Order this product through the following link:

http://www.lookpolymers.com/polymer_Master-Bond-EP65HT-Fast-Setting-Epoxy-Resists-High-Temperatures.php

Physical Properties	Metric	English	Comments
Viscosity	8000 - 10000 cP	8000 - 10000 cP	Part B
	55000 - 110000 cP	55000 - 110000 cP	Part A

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	75 - 85	75 - 85	
Tensile Strength at Break	>= 51.7 MPa	>= 7500 psi	
Tensile Modulus	>= 3.10 GPa	>= 450 ksi	
Shear Strength	>= 17.2 MPa	>= 2500 psi	Bond, Al to Al

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	204 °C	400 °F	
Minimum Service Temperature, Air	-51.1 °C	-60.0 °F	
Glass Transition Temp, Tg	130 - 135 °C	266 - 275 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00 \times 10^{14}$ ohm-cm	$\geq 1.00 \times 10^{14}$ ohm-cm	
Dielectric Constant	4.1	4.1	
	@Frequency 60.0 Hz, Temperature 25.0 °C	@Frequency 60.0 Hz, Temperature 77.0 °F	

Processing Properties	Metric	English	Comments
Cure Time	360 - 600 min	6.00 - 10.0 hour	
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Gel Time	8.00 - 14.0 min	8.00 - 14.0 min	
Shelf Life	6.00 Month	6.00 Month	unopened containers

Descriptive Properties	Value	Comments
Mixing Ratio (A to B)	10:1	by weight

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