

Master Bond EP21TDC-2LO Two component, highly flexibilized epoxy resin compound

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

Material Notes:

Product Description: Master Bond Polymer System EP21TDC-2LO is a two component, highly flexible epoxy resin compound for high performance bonding, sealing, coating, and encapsulation. It is formulated to cure fully at room temperature or more quickly at elevated temperatures with an easy to use one to three mixing ratio by weight. EP21TDC-2LO has good toughness and, unlike most flexibilized epoxies, it passes NASA low outgassing test criteria. The cured compound exhibits a high elongation (greater than 25%), good for a thermally conductive epoxy. EP21TDC-2LO produces very little heat after mixing, which allows for a long working life. This epoxy resin compound exhibits good tensile shear and peel strength for bonding and sealing many different substrates including metals, glass, ceramics, vulcanized rubber and many plastics. The cured epoxy is an excellent electrical insulator with good chemical resistance to water, fuels and many solvents. Its able to withstand thermal shock, thermal cycling and mechanical shock. It has a service temperature range of 4K to +250°F and has been successfully employed in a number of cryogenic applications. Master Bond EP21TDC-2LO is an exceptionally versatile system that offers the structural benefits of an epoxy, yet incorporates flexibility and very good thermal conductivity. It is widely used in the electronic, electro-optical and related industries. The color of Part A is white; Part B is off-white. **Product Advantages:** Convenient mixing: non-critical one to three mix ratio by weight Easy application: product spreads evenly and smoothly; long working life NASA low outgassing approved Versatile cure schedules: ambient temperature cures or fast elevated temperature cures High peel strength and elongation Excellent flexibility; exceptional thermal shock and chemical resistance Bonding properties on similar and dissimilar substrates, superb impact resistance High thermal conductivity combined with good electrical insulation properties Cryogenically serviceable down to 4K Information provided by MasterBond®

Order this product through the following link:

http://www.lookpolymers.com/polymer_Master-Bond-EP21TDC-2LO-Two-component-highly-flexibilized-epoxy-resin-compound.php

Physical Properties	Metric	English	Comments
Viscosity	35000 - 85000 cP	35000 - 85000 cP	Part A
	300000 - 800000 cP	300000 - 800000 cP	Part B

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	30 - 40	30 - 40	
Tensile Strength at Break	>= 20.7 MPa	>= 3000 psi	
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Shear Strength	>= 5.52 MPa	>= 800 psi	AI/AI, Tensile
Peel Strength	>= 2.63 kN/m	>= 15.0 pli	T-peel

Thermal Properties	Metric	English	Comments
CTE, linear	80.0 - 90.0 µm/m-°C	44.4 - 50.0 µin/in-°F	

Thermal Properties	Metric	English	Comments
Thermal Conductivity	1.44 W/m-K	0.0 BTU-in/hr- ft ² -°F	
Maximum Service Temperature, Air	121 °C	250 °F	
Minimum Service Temperature, Air	-269 °C	-452 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+14 ohm-cm	>= 1.00e+14 ohm-cm	

Processing Properties	Metric	English	Comments
Cure Time	120 - 180 min	2.00 - 3.00 hour	
	@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	>= 60 min	>= 60 min	100 gram mass

Descriptive Properties	Value	Comments
Mixing Ratio (A to B)	1:3	

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