

## Master Bond Supreme 11AO Electrically Isolating Adhesive and Sealant

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

## **Material Notes:**

Description: Master Bond Polymer System SURPEME 11A0 is a two component epoxy resin system for high performance bonding and sealing formulated to cure at room temperature or more rapidly at elevated temperatures with a convenient one-to-one (1:1) mix ratio by weight or volume. Its most outstanding features include high thermal conductivity, excellent electrical insulation properties, temperature resistance up to 250°F as well as superior bond strength. SURPEME 11A0 is a paste that can be applied without sagging or dripping even on vertical surfaces. As a toughened system, it is well suited to applications involving thermal cycling. Its chemical resistance profile includes water, oils and most organic solvents. It has excellent adhesion to most metals, ceramics, glass and vulcanized rubbers as well as many plastics. SURPEME 11A0 is also unique in that the bond strength is high in both shear and peel modes. Both part A and B are colored off-white. Master Bond SURPEME 11A0 is widely used in the electronic, electrical, computer, metalworking, appliance, automotive and chemical industries where high bond strength and superior heat transfer properties are required. Product Advantages: Easy application; adhesive spreads evenly and smoothly. Versatile cure schedules; ambient temperature cures or faster elevated temperature cures as required. High bond strength to a wide variety of substrates; excellent adhesive properties. High thermal conductivity with exceptional electrical insulation properties. Toughened system; well suited for bonding dissimilar substrates. Good physical strength characteristics; especially high shear & peel strengths. Thick paste; non-drip type system. Outstanding resistance to a wide range of chemicals. Thermally stable up to 250°F with good thermal cycling properties. Information provided by MasterBond®

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Master-Bond-Supreme-11AO-Electrically-Isolating-Adhesive-and-Sealant.php

Physical Properties	Metric	English	Comments
Water Absorption	<= 1.0 %	<= 1.0 %	24 hr immersion

Mechanical Properties	Metric	English	Comments
Shear Strength	10.6 MPa	1540 psi	Bond, Al to Al, after 30 days water immersion
	11.0 MPa	1600 psi	Bond, AI to AI, RT cure
Peel Strength	>= 2.63 kN/m	>= 15.0 pli	T-peel, Al to Al

Thermal Properties	Metric	English	Comments
CTE, linear	30.0 - 35.0 μm/m-°C	16.7 - 19.4 μin/in-°F	
Thermal Conductivity	1.44 W/m-K	10.0 BTU-in/hr-ft <sup>2</sup> -°F	
Maximum Service Temperature, Air	121 °C	250 °F	
Minimum Service Temperature, Air	-73.3 °C	-100 °F	
Glass Transition Temp, Tg	75.0 - 80.0 °C	167 - 176 °F	



Electrical Properties	Metric	English	Comments
Dielectric Strength	>= 15.7 kV/mm	>= 400 kV/in	
	@Thickness 3.17 mm	@Thickness 0.125 in	

Processing Properties	Metric	English	Comments
Cure Time	60.0 - 120 min	1.00 - 2.00 hour	
	@Temperature 93.3 °C	@Temperature 200 °F	
	1440 - 2160 min	24.0 - 36.0 hour	
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Pot Life	25 - 30 min	25 - 30 min	200 gram mass
	30 - 40 min	30 - 40 min	100 gram mass
Shelf Life	6.00 Month	6.00 Month	unopened containers
	@Temperature 23.9 °C	@Temperature 75.0 °F	unopenea containers

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

## **Contact Songhan Plastic Technology Co.,Ltd.**

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