

Permabond ES569 Epoxy Resin

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

Material Notes:

PERMABOND® ES569 is a single-part heat cured epoxy adhesive with excellent adhesion to metal surfaces as well as composite materials. The high bond strength of this adhesive allows it to replace mechanical fastening, soldering, brazing or welding. ES569 has been designed to be non-sagging, allowing the product to be used in large gaps and on vertical surfaces. It is also ideal for bonding electronic components as it has high wet strength and is non-stringing and produces an excellent drop profile as well as withstanding solder reflow processes.

Features & Benefits: Excellent adhesive strength Excellent resistance to vibration Easy to use – no mixing required High shear and peel strength High temperature resistance Good resistance to chemicals Non-sag, thixotropic Information provided by Permabond.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Permabond-ES569-Epoxy-Resin.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	Uncured
Viscosity	250000 - 500000 cP @Temperature 25.0 °C	250000 - 500000 cP @Temperature 77.0 °F	Uncured
Storage Temperature	2.00 - 7.00 °C	35.6 - 44.6 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	80	80	
Adhesive Bond Strength	9.00 - 11.0 MPa	1310 - 1600 psi	FRP Glass/Epoxy, Shear; ASTM D1002
	10.0 - 12.0 MPa	1450 - 1740 psi	Carbon Fiber, Shear; ASTM D1002
	14.0 - 27.0 MPa	2030 - 3920 psi	Zinc, Shear; ASTM D1002
	17.0 - 31.0 MPa	2470 - 4500 psi	Aluminum, Shear; ASTM D1002
	27.0 - 41.0 MPa	3920 - 5950 psi	Steel, Shear; ASTM D1002
Peel Strength	4.00 - 4.80 kN/m	22.8 - 27.4 pli	

Thermal Properties	Metric	English	Comments
CTE, linear	45.0 µm/m-°C	25.0 µin/in-°F	
Thermal Conductivity	0.500 W/m-K	3.47 BTU-in/hr-ft²-°F	

Processing Properties	Metric	English	Comments
Cure Time	<= 3.00 min	<= 0.0500 hour	Induction

Processing Properties	Metric ⁱⁿ	English ^{hour}	Comments
	@Temperature 150 °C	@Temperature 302 °F	Oven
	60.0 min	1.00 hour	Oven
	@Temperature 130 °C	@Temperature 266 °F	
Shelf Life	12.0 Month	12.0 Month	

Descriptive Properties	Value	Comments
Appearance	Black Paste	Uncured
Maximum Gap Fill (mm)	5	
Strength Retention	100% at 0°C	Relative to 0°C
	25% at 200°C	Relative to 0°C
	65% at 150°C	Relative to 0°C
	85% at 100°C	Relative to 0°C
	95% at 50°C	Relative to 0°C

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