

Permabond ES558 Epoxy Resin

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

Material Notes:

PERMABOND ES558 is a single-part epoxy paste which flows like solder when heated during curing. The adhesive is toughened for maximum impact resistance, along with excellent peel and shear strength. ES558 is ideal for bonding a wide range of materials including metals, ferrites, ceramics and composites. Features & Benefits: Excellent adhesive strength Excellent resistance to vibration Easy to use – no mixing required High shear and peel strength Good impact strength High temperature resistance Good resistance to chemicals
Information provided by Permabond.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Permabond-ES558-Epoxy-Resin.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.50 g/cc	1.50 g/cc	Uncured
Viscosity	100000 - 300000 cP @Temperature 25.0 °C	100000 - 300000 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	17.0 - 31.0 MPa	2470 - 4500 psi	Aluminum, Shear; ASTM D1002
	14.0 - 41.0 MPa	2030 - 5950 psi	Zinc, Shear; ASTM D1002
	27.0 - 41.0 MPa	3920 - 5950 psi	Steel, Shear; ASTM D1002

Thermal Properties	Metric	English	Comments
CTE, linear	45.0 µm/m-°C	25.0 µin/in-°F	
Thermal Conductivity	0.550 W/m-K	3.82 BTU-in/hr-ft²-°F	
Glass Transition Temp, Tg	125 °C	257 °F	

Processing Properties	Metric	English	Comments
Cure Time	<= 3.00 min	<= 0.0500 hour	Induction
	45.0 min @Temperature 150 °C	0.750 hour @Temperature 302 °F	
	60.0 min	1.00 hour	

Processing Properties	@Temperature 130 °C Metric	@Temperature 266 °F English	Comments
Shelf Life	12.0 Month	12.0 Month	

Descriptive Properties	Value	Comments
Appearance	Silver-grey	Uncured
Maximum Gap Fill (mm)	0.5	
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