

Permabond TA440 Toughened Acrylic Adhesive

Category : Polymer , Adhesive , Thermoset , Acrylic/Cyanoacrylate Adhesive

Material Notes:

PERMABOND TA440 is a two component structural acrylic adhesive suitable for bonding metals, glass, wood, ferrites, ceramics and some rigid plastics. This adhesive may be used in a variety of structural bonding applications due to its versatile performance capabilities.

Permabond TA440 provides high strength while maintaining excellent flexibility, resulting in tough, durable bonds with outstanding impact and peel resistance. Handling strength is achieved in a few minutes at room temperature. Mix Ratio 1:1
Features & Benefits: Adhesion to a wide variety of substrates Fast cure at room temperature No mix application High shear and peel strength Good impact strength Good chemical resistance Information provided by Permabond.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Permabond-TA440-Toughened-Acrylic-Adhesive.php

Physical Properties	Metric	English	Comments
Density	1.10 g/cc	0.0397 lb/in ³	TA440A
	1.10 g/cc	0.0397 lb/in ³	TA440B
Viscosity	8000 - 12000 cP @Temperature 25.0 °C	8000 - 12000 cP @Temperature 77.0 °F	TA440A
	8000 - 12000 cP @Temperature 25.0 °C	8000 - 12000 cP @Temperature 77.0 °F	TA440B
Storage Temperature	5.00 - 25.0 °C	41.0 - 77.0 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength	25.0 MPa	3630 psi	DIN 53288
Adhesive Bond Strength	15.0 - 25.0 MPa	2180 - 3630 psi	Mild steel, Shear
Impact	25	25	kJ/m ² Adhesive Impact Strength; ASTM D950
Peel Strength	1.80 - 2.60 kN/m	10.3 - 14.8 pli	ISO 4578

Thermal Properties	Metric	English	Comments
CTE, linear	80.0 µm/m-°C	44.4 µin/in-°F	ASTM D696
Thermal Conductivity	0.100 W/m-K	0.694 BTU-in/hr-ft ² -°F	ASTM C177
Maximum Service Temperature, Air	121 °C	250 °F	
Minimum Service Temperature, Air	-53.9 °C	-65.0 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.00e+13 ohm-cm	2.00e+13 ohm-cm	ASTM D257
Dielectric Constant	4.6	4.6	ASTM D150
	@Frequency 1.00e+7 Hz	@Frequency 1.00e+7 Hz	
Dielectric Strength	30.0 - 50.0 kV/mm	762 - 1270 kV/in	ASTM D149

Processing Properties	Metric	English	Comments
Cure Time	<= 0.500 min	<= 0.00833 hour	Handling time
	30.0 - 60.0 min	0.500 - 1.00 hour	working strength
	1440 min	24.0 hour	full cure
Shelf Life	12.0 Month	12.0 Month	

Descriptive Properties	Value	Comments
Appearance	Amber for TA440A	
	Green for TA440B	
Maximum Gap Fill (mm)	0.5	
Strength Retention	100% at 0°C	Relative to 0°C
	15% at 175°C	Relative to 0°C
	22% at 150°C	Relative to 0°C
	75% at 100°C	Relative to 0°C
	96% 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