

## Permabond TA4202 Toughened Acrylic Adhesive

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

### Material Notes:

PERMABOND® TA4202 is a 2-part, 1:1 toughened acrylic adhesive. It can be used to bond a wide variety of materials including metals, plastics, GRP, ceramics, wood and other substrates. It is convenient to use in an easy-to-dispense cartridge or it can be used bead on bead without a mixing nozzle. Mix ratio 1:1. Features & Benefits: Adhesion to a wide variety of substrates Fast cure at room temperature Can be used with or without nozzle 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-TA4202-Toughened-Acrylic-Adhesive.php](http://www.lookpolymers.com/polymer_Permabond-TA4202-Toughened-Acrylic-Adhesive.php)

Physical Properties	Metric	English	Comments
Specific Gravity	0.990 g/cc	0.990 g/cc	TA4202B
	1.05 g/cc	1.05 g/cc	TA4202A
Viscosity	40000 - 50000 cP	40000 - 50000 cP	TA4202A
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	40000 - 50000 cP	40000 - 50000 cP	TA4202B
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Storage Temperature	2.00 - 7.00 °C	35.6 - 44.6 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	75 - 80	75 - 80	ISO 868
Adhesive Bond Strength	19.0 - 21.0 MPa	2760 - 3050 psi	Steel, Shear; ASTM D1002
	22.0 - 24.0 MPa	3190 - 3480 psi	Aluminum, Shear; ASTM D1002
Peel Strength	8.00 - 12.0 kN/m	45.6 - 68.5 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 <sup>2</sup> -°F	ASTM C177

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

Electrical Properties	@Frequency 1.00e+7 Metric	@Frequency 1.00e+7 English	Comments
Dielectric Strength	30.0 - 50.0 kV/mm	762 - 1270 kV/in	ASTM D149

Processing Properties	Metric	English	Comments
Cure Time	4.98 - 10.0 min	0.0830 - 0.167 hour	handling time
	20.0 - 25.0 min	0.333 - 0.417 hour	working strength
	1440 min	24.0 hour	full cure
Pot Life	2.00 - 3.00 min	2.00 - 3.00 min	
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Shelf Life	6.00 Month	6.00 Month	

Descriptive Properties	Value	Comments
Appearance	Green, TA4202A	Uncured
	Light Purple, Mixed Color	Uncured
	Pink, TA4202B	Uncured
Maximum Gap Fill (mm)	3	
Strength Retention	100% at 0°C	Relative to 0°C
	35% at 100°C	Relative to 0°C
	5% at 150°C	Relative to 0°C
	80% at 50°C	Relative to 0°C

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China