RepPoxy TMA - Traffic Marker Adhesive



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Traffic Marker Adhesive

DESCRIPTION:

RepPoxy TMA is an AASHTO M237 certified two part epoxy standard set adhesive system. It was specifically designed for the bonding of traffic markers, delineators, safety posts.

FEATURES:

- New as well as old concrete surfaces
- Bonding plastics, steel, and concrete to concrete
- Fast setting
- Convenient 1:1 mix ratio
- High-load bearing capacity
- Resists the effects of freeze-thaw cycling
- Excellent water repellency
- Chemical & Impact Resistant
- Fast drying in any temperatures

USES:

- Traffic markers
- Delineators
- Safety posts
- Marine Platforms, Ramps
- Airfield & Highway Pavement Marking
- Concrete & Masonry Surfaces
- Parking Structures & Bridges

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TECHNICAL DATA:

RepPoxy TMA complies with AASHTO M 237-96 (2009) Epoxy Resin Adhesives for Bonding Traffic Markers to Hardened Portland Cement and Asphalt, Arizona 706.5, WSDOT 9-26.2.

COVERAGE GUIDE:

- 2 ½" x 4 ½" (6.35 cm x 11.43 cm) Rect. Marker 100 per gallon (3.78 liters)
- 4" (10.16 cm) Round/Square 50 per gallon (3.78 liters)
- 6" (15.24 cm) Round 25 per gallon (3.78 liters)
- 8" (20.32 cm) Delineator or Pole Base 15 per gallon (3.78 liters)

PREPARATION:

Remove all dirt, oil, and loose or foreign material. Any metal in contact with grout must be free of rust, oil, grease, and other foreign matter which would limit bond. Remove all excess water before placement of epoxy. It is recommended to roughen bonding surfaces with abrasive media appropriate for the materials being bonded (such as medium grit emery paper, abrasive disks, grit blasting, wire brushes, etc.). Abrasion should always be followed by degreasing to

remove contaminants and loose particles. **PrepEtch** can be used to achieve various CSP #'s profiles.

MIXING:

Combine and mix **RepPoxy TMA** just prior to anchoring the markers. Automatic dispensing equipment is recommended. Hand mixing should be limited to very small projects. When using **RepPoxy TMA** epoxy, combine equal parts of Side A and Side B. Mix thoroughly. Properly mixed, the epoxy will be uniform gray, without visible streaks.

PLACEMENT:

Apply mixed material immediately. With a trowel or spatula, spread a thin film over the surface to be bonded. Press into place and maintain light pressure during cure for optimum bonding.

CLEAN UP:

Uncured epoxy may be cleaned off of tools with Methyl Ethyl Ketone (MEK), Toluene, or solvent blends.

Caution: These solvents may damage plastics.

COLOR:

Concrete Gray

STORAGE:

The material should be stored between $40^{\circ}F - 80^{\circ}F$ ($4^{\circ}C - 27^{\circ}C$) in a cool, dry area away from direct sunlight.



SHELF LIFE:

Shelf life of properly stored, unopened containers is 12 months (one year). Excessive temperature differential and / or high humidity can shorten the shelf life expectancy.

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LIMITATIONS:

DO NOT place at temperatures below 40°F (5°C). Avoid hazards by following all precautions found in the Safety Data Sheets (SDS), product labels, and technical literature. Wear protective gloves and goggles. Avoid prolonged skin contact.

PHYSICALS:

Table 1: Handling Properties		
Ratio by volume	1:1	
Pounds/Gallon (Kilograms/Liters)		
Side A	12.47 lbs/gal (1.50 kg/l)	
Side B	11.45 lbs/gal (1.37 kg/l)	
Side A and B	11.97 lbs/gal (1.43 kg/l)	
Gel Time at 77°F (25°C) 100 gram mass	7 min	
Bondline Thickness	45 mils	

Table 2: Adhesive Properties		
Substrate	Cure Schedule	Tensile Strength
	1 hour 77°F (25°C)	100 psi
	2 hours 77°F (25°C)	370 psi
	4 hours 77°F (25°C)	760 psi
Aluminum Alloy	24 hours 77°F (25°C)	2800 psi
2024T3, acid etched	1 day 77°F (25°C) followed by 2 hours at 212°F (100°C)	4000 psi
	7 days at 77°F (25°C) followed by 7 days water soak	3300 psi
Cold-rolled Steel, solvent-wiped	1 day at 77°F (25°C) followed by 2 hours at 212°F (100°C)	1600 psi
Impact Strength, Ft-lb (N-m)		> 6 ½ ft-lb > 9.0 N-m

WARRANTY:

Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either **TuffTex Materials** or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.

Table 3: Physical Properties		
Color		
Side A Resin	Tan	
Side B Converter	Dark Gray	
Combined Side A and Side B	Concrete Gray	
Viscosity		
Side A Resin	5 rpm 39000 10 rpm 32000	
Side B Converter	5 rpm 42000 10 rpm 35000	
Difference in Viscosity Between the 2 Sides	< 15%	
Stability: % increase in Viscosity After 14-day heat aging @ 120°F (49°C)	< 20%	
Thixotrophy @ 120°F (49°C) (sag on test panel)	< 2 mm	

Table 4: Approximate Set Times		
Temperature	Set Time (Hr.)	
115°F (46°C)	0.5	
95°F (35°C)	1.0	
77°F (25°C)	2.0	
60°F (16°C)	4.0	
50°F (10°C)	7.0	

DISCLAIMER:

Refer to the MSDS sheet before use. The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of NovaTuff Coatings. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Contact your local **TuffTex Materials** distributor or technical representative for additional technical data and instructions.