

POLYMER COMPOSITES, INC.

1871 Lake Place, Ontario, CA 91761 • (909) 673-1007 • Fax: (909) 673-1605

MAX TCR THICK CASTING RESIN Technical Bulletin

DESCRIPTION

MAX TCR A/B is a two part epoxy system specially formulated to provide transparency and color stability. MAX TCR cures to a very flexible and clear casting. It is commonly used in castings in artificial silk floral arrangements to simulate the appearance of water.

MAX TCR A/B can also be utilized as a removable potting or encapsulating resin for hermetic sealing.

It produces low exothermic temperatures even when mixed and MAX TCR A/B in large mass (1000 grams or 1 quart). MAX TCR A/B bonds to glass, wood, ceramics, and metals and plastic substrates.

MAX TCR A/B is 100% solids and does not contain Ozone Depleting Chemicals (ODC).

MAX TCR A/B performs well in a wide range of service temperature. It demonstrates low exothermic reaction and very little shrinkage during and after cure. MAX TCR A/B is tough, and physical impact resistant

MAX TCR A/B casting resin capable of curing in high humidity and or low temperature. MAX TCR A/B offers a very long working time and low heat generation to provide excellent water clarity and color stability. It is room temperature cured but can be snap cured at elevated temperatures for a short period of time. MAX TCR A/B resists cracking and stress mark due extreme bending, flexing and cyclic vibration and movement. It remains impact resistant even at temperatures below 14°F and will not crack at up to 90°F.

APPLICATION AND USAGE

MAX TCR A/B is clear and easily poured into place. It is self-leveling if mixed and cured at room temperature(70°F - 75°F).

Clean and prepare the glass vase before mixing the resin and curing agent together. Place the vase on a level surface in a controlled environment free of airborne contaminants.

Mix 100 parts resin to 100 parts of curing agent by weight or equal parts by volume in a clean container. Mix thoroughly but gently as to not introduce excessive air bubbles during mixing. For mix meter equipment, ensure the flow rate is dispensing at an equal volume. Use a minimum 28-element turn mix-nozzle, ensure mixture is clear and homogenous. Dispense the mixed resin directly into the prepared vase.

Dispense the mixed resin to the center of the base and allow to fill until the desired volume is attained. Insert floral arrangement per design and support to prevent movement. Allow at least 36 to 48 hours at 75°F before handling.

PHYSICAL PROPERTIES

Density	1.09
Form and Color	Clear
Viscosity	2000 cPoise At 77°F Mixed
Mix Ratio	100 Parts "B" to 100 Parts "A" By Weight 1:1 By Volume
Working Time	>4 hours at 77°F (1000 Gram Mass)
Peak Exotherm	95°F (1000 Gram Mass)
Full-Cure Time	48 to 96 Hours Minimum or 24 hours at room temperature plus 120 Minutes At 175°F
Hardness	50 ± 5 Shore D
Tee-Peel Strength	4 Pounds Per Inch Width
Tear Resistance	60 Lb.
Tensile Shear Strength	800 PSI At 77°F
Elongation	75% At 77°F

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PACKAGING AND STORAGE

MAX TCR A/B is available 1 gallon, .5 gallon, and 55 gallon kits. Use size kits and special packaging requests are also available. MAX TCR A/B should be stored in a cool dry place. Do not store above 30 °C for prolonged period. MAX TCR A/B is warranted for six months from the date of shipment.

SAFETY NOTE

This product is for industrial use only. Please review all precautions before using product. As with all chemicals of the same nature, avoid prolonged inhalation and repeated bare skin contact. Always wear safety goggles and impervious rubber gloves when handling this material. Large mass curing of this product is not recommended for it may produce noxious fumes.

EU RoHS 2:

This material does not contain any hazardous substances as determined by the European (RoHS)

RoHS Substances/Compounds	Weight (mg)	PPM
Cadmium and Cadmium Compounds	0	<100
Hexavalent Chromium and Compounds	0	<1000
Lead and Lead Compounds	0	<1000
Mercury and Mercury Compounds	0	<1000
Polybrominated Biphenyls (PBB)	0	<1000
Polybrominated Diphenylethers (PBDE)	0	<1000

IMPORTANT NOTICE

The information contained herein is based on data believed to be accurate at the time of publication. Data and parameters cited have been obtained by Polymer Composites Inc using materials under controlled conditions. Data of this type should not be used for specification for fabrication and design. It is the user's responsibility to determine this product's fitness for use.

Polymer Composites Inc warrants only that this product will only meet the cited parameters within the established conditions. There is no warranty of merchantability of fitness of use, nor any other express implied warranty. The user's exclusive remedy and the manufacturer's liability are limited to refund of the purchase price or replacement of the product within the agreed warranty period.

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The user should thoroughly test any proposed use of this product and independently conclude satisfactory performance in the application. Likewise, if the manner in which this product is used requires government approval or clearance, the user must obtain said approval.

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