MAS
TIME SAVING EPOXY RESINS

DEEP POUR X

CLEAR CASTING EPOXY RESIN SYSTEM

TECHNICAL DATA BULLETIN

SYSTEM BENEFITS:

The MAS Deep Pour X Epoxy Resin System is a 100% solids, two-component, two to one by volume room temperature curing epoxy resin system formulated for deep pour casting, encapsulating and molding applications. It can be cast three times as thick as the standard MAS Deep Pour epoxy resin system and allows users to complete projects twice as fast. The super slow gel time and minimally exothermic reaction allows Deep Pour X to be cast 3" thick in a single pour. It cures to a clear, glass-like finish that resists scratching and yellowing with an extended gel time to minimize exotherm and improve air release.

- Epoxy system specifically designed for up to 3" casting
- Clear system is compatible with a variety of colorants if desired
- Long gel time to mitigate yellowing and cracking during cure

HANDLING PROPERTIES	MAS DEEP POUR X	Test Method
Resin Density at 25°C, lbs/gal	9.3	ASTM D1475
Hardener Density at 25°C, lbs/gal	8.0	ASTM D1475
Resin Viscosity at 25°C, cP	600	ASTM D2196
Hardener Viscosity at 25°C, cP	70	ASTM D2196
Mix Ratio by Weight	100A : 44B	Calculated
Mix Ratio by Volume	2A : 1B	Calculated
Initial Mixed Viscosity 25°C, cP	300	ASTM D2196
Gel Time at 25°C, 150g mass, hrs.	22	ASTM D2471
Gel Time at 25°C, 500g mass, hrs.	17	ASTM D2471

PHYSICAL PROPERTIES	MAS DEEP POUR X	Test Method
Color	Clear	Visual
Izod Impact, Notched, ft-lb/in	0.80	ASTM D256
Tensile Strength, psi	6,800	ASTM D638
Tensile Elongation, %	6.7	ASTM D638
HDT, Room Temp Cure, °F	121	ASTM D648
HDT, Post Cure, °F	115	ASTM D648
Compressive Strength, psi	8,300	ASTM D695
Flexural Strength, psi	9,600	ASTM D790
Flexural Modulus, psi	321,000	ASTM D790
Cured Density, g/cm^3 (lbs/in^3)	1.11 (0.040)	ASTM D792
Volumetric Yield, in^3/lb	24.9	ASTM D792
Volumetric Shrinkage, %	4.7	ASTM D792/2196
Hardness, Shore D	83	ASTM D2240

INSTRUCTIONS FOR USE:

All surfaces must be clean, dry and free of contamination. Contaminates include, but are not limited to dust, oil, moisture, sap, lint, and sanding debris. Do not use paper towels, dirty rags, contaminated sandpaper, or touch surface with oily fingers. Sand as needed and clean off sanding debris. Wipe surface down with a clean cotton t-shirt rag soaked in an oil free solvent like denatured alcohol prior to applying epoxy seal coat. DO NOT pour Deep Pour X on unsealed wood or porous surfaces. If surface is not sealed prior to pouring, moisture will produce foam and bubbles producing pour results. Molds and patterns should be treated with release or parting agents.

MIXING:

Combine 2-parts Deep Pour X Resin (Part A) to 1-part Deep Pour X Hardener (2A:1B) by volume, 100-parts resin to 43-parts hardener (100A:43B) by weight. Using the recommended mix ratio is VERY important when using epoxy. DO NOT deviate to attempt to speed up or slow down the gel time. Mix thoroughly for 5-10 minutes scraping sides and bottom of container occasionally until no streaks or striations. Add colored pigment powder or dye to mixture if desired. Transfer to second clean/dust free container and mix 5-10 minutes again until fully blended. Before pouring, let fully mixed epoxy dwell in mixing container 30-45 minutes at 60-80F to allow release of bubbles caused by mixing. For product application tutorial and additional information visit www.masepoxies.com or call at 1-800-755-8568.

STORAGE AND CRYSTALLIZATION:

Store between 60-90°F in a dry place. After use, tightly reseal all containers and store products on a raised surface during cold weather and avoid storing near outside walls or doors. If available, purge with dry nitrogen to preserve color and minimize moisture contamination. Do not allow to freeze during winter storage. Do not use material with any signs of crystallization such as solid chunks, grainy texture or white color. Crystallization can be reversed by heating the material to 125-140°F, and stirring occasionally, until all crystals dissolve.

SAFETY HANDLING:

Wear protective gloves, clothing, and eye/face protection. Use only outdoors or in a well-ventilated area. Avoid contact to the skin and eyes. Avoid breathing dust, fumes, gas mist, vapors and spray. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse. These products may cause skin and respiratory allergic reactions. Consult product Safety Data Sheets for complete precautions for use of this product.

Endurance Technologies, Inc. has experience only in the compounding of resins and hardeners and not in the actual manufacture of tools or parts. Each piece is different. The user should run tests to assure the suitability of the system for use in a particular application. The test data and results set forth herein are based on laboratory work and do not necessarily indicate the results that the buyer or user will attain.

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