



CLEAR UV INHIBITED ARTIST EPOXY RESIN SYSTEM **TECHNICAL DATA BULLETIN**

SYSTEM BENEFITS:

MAS Art Pro epoxy resin system is a 100% solids, two-component, one to one by volume, room temperature curing epoxy resin system ideally suited for epoxy art, lacing, dirty pours and small castings. It cures to a clear, glass-like finish that resists scratching and yellowing. The system demonstrates excellent anti-blushing properties, improved UV stability and will not distort with age.

- Clear epoxy resin system compatible with a variety of different colorants
- UV inhibitors in the formulation impart improved resistance to discoloring in the sun
- Harder and more scratch resistant than other products on the market for this application

HANDLING PROPERTIES	MAS ART PRO	Test Method
Resin Density at 25°C, lbs/gal	9.7	ASTM D1475
Hardener Density at 25°C, lbs/gal	8.2	ASTM D1475
Resin Viscosity at 25°C, cP	9,000	ASTM D2196
Hardener Viscosity at 25°C, cP	1,700	ASTM D2196
Mix Ratio by Weight	100A : 84	Calculated
Mix Ratio by Volume	1A : 1B	Calculated
Initial Mixed Viscosity 25°C, cP	3,500	ASTM D2196
Gel Time at 25°C, 150g mass, min.	60	ASTM D2471

PHYSICAL PROPERTIES	MAS ART PRO	Test Method
Color	Clear	Visual
Izod Impact, Notched, ft-lb/in	0.71	ASTM D256
Tensile Strength, psi	5,400	ASTM D638
Tensile Modulus, psi	279,000	ASTM D638
Tensile Elongation, %	5.7	ASTM D638
HDT, Room Temp Cure, °F	110	ASTM D648
HDT, Post Cure, °F	111	ASTM D648
Compressive Strength, psi	8,000	ASTM D695
Flexural Strength, psi	8,400	ASTM D790
Flexural Modulus, psi	242,000	ASTM D790
Cured Density, g/cm³ (lbs/in³)	1.11 (0.040)	ASTM D792
Volumetric Yield, in³/lb	25.0	ASTM D792
Volumetric Shrinkage, %	3.19	ASTM D792/2196
Hardness, Shore D	82	ASTM D2240

MAS ART PRO

PAGE 2 OF 3



WORKING CONDITIONS:

For best results all materials and workspace should be maintained at 70°F-80°F. Epoxy is a temperature sensitive material. When cool it's thicker and sets slower. When warm it's thinner and sets faster. When the material or working conditions are below 70°F, Art Pro may become too viscous to properly release air and self-level. Working in conditions with material above 80°F, Art Pro may set too quickly and become too hot and exotherm, which could cause it to yellow, distort or crack.

SURFACE PREP:

All surfaces must be clean, dry and free of contamination. Contaminants include, but are not limited to dust, oil, moisture, sap, lint, and sanding debris. Allow paint and other elements to fully dry before overcoating with epoxy, preform small scale cure test if unsure about compatibility. Do not use paper towels, dirty rags, contaminated sandpaper, or touch the 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. Always use clean dry tools for mixing and applying.

MIXING:

Combine 1-part Art Pro Resin to 1-part Art Pro Hardener (1A:1B) by volume, or 100-parts resin to 84-parts hardener (100A:84B) 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 1-2 minutes while 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 1-2 minutes again until fully blended. Let sit for 1-2 minutes to allow air bubbles a chance to start rising to surface, and then use immediately. Do not scrape from the bottom or sides when pouring as this can introduce unmixed material to your project. Take extra care not to whip in excess air. The whole mixing process shouldn't take more than 5-10 minutes. If the mixed material starts to get warm, that's your last warning the curing reaction is starting to take place and you need to get the epoxy poured onto your surface ASAP. 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.

Endurance Technologies, Inc. makes no warranty expressed or implied, including warranties of merchantability or fitness for a particular use. Under no circumstances will Endurance Technologies, Inc. be liable for incidental, consequential or other damages, alleged negligence, breach of warranty, strict liability, tort or any other legal theory arising out of the use or handling of this product.



MAS ART PRO

PAGE 3 OF 3

Revised February 2020



