



TECHNICAL DATA BULLETIN

TOTALBOAT CRYSTAL CLEAR HARDENER

TotalBoat Epoxy Resin with TotalBoat Crystal Clear Hardener is a non-blushing, low viscosity, low odor epoxy laminating resin system that may be used for a wide variety of applications. It has a simple 3 to 1 mix ratio by volume, wets out fiberglass fabric easily, and requires no messy wash downs.

HANDLING PROPERTIES

	<u>VALUE</u>	<u>TEST METHOD</u>
Mix Ratio By Weight	100A : 27B	Calculated
Mix Ratio By Volume	3A : 1B	Calculated
Initial Mixed Viscosity at 75°F, cP	530	ASTM D2196
Pot Life at 75°F, 150g mass, min.	20	ASTM D2471
Work Life at 75°F, Thin Film, hrs.	3-4	
Set Time at 75°F, Thin Film, hrs.	10-15	
Cure Time at 75°F, Thin Film, days	3-5	
Minimum Recommended Temp, °F	60	

PHYSICAL PROPERTIES

	<u>VALUE</u>	<u>TEST METHOD</u>
Color	Clear	Visual
Tensile Strength, psi	9,500	ASTM D638
Tensile Modulus, psi	450,000	ASTM D638
Tensile Elongation, %	7.8	ASTM D638
HDT, Room Temperature Cure, °F	125	ASTM D648
HDT, Post Cure, °F	145	ASTM D648
Compressive Strength, psi	12,000	ASTM D695
Flexural Strength, psi	14,800	ASTM D790
Flexural Modulus, psi	425,000	ASTM D790
Cured Density, g/cm ³ (lbs/in ³)	1.15 (0.041)	ASTM D792
Volumetric Yield, in ³ /lb	24.0	ASTM D792
Volumetric Shrinkage, %	4.9	ASTM D792/D1475
Hardness, Shore D	88	ASTM D2240





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MIXING AND HANDLING:

For best results, use this product at or above 55°F. Surfaces should be clean, dry and sanded before application to remove dirt, dust, grease, loose paint, oils or other contaminants. Add the hardener to the resin at the specified mix ratio and mix for 2 minutes, or until mixture is blended thoroughly. Always use clean, dry tools for mixing and applying. Cure time is faster at warmer temperatures and slower at cooler temperatures.

STORAGE:

Store at 60-90°F in a dry place. After use, tightly reseal all containers. Store products on a raised surface off the floor during cold weather and avoid storing near outside walls or doors. Epoxy resins that are contaminated with dust or moisture, or are subjected to low temperatures may crystallize. Do not use material that has any sign of crystallization until it has been liquified. A crystallized resin or hardener can be returned to its original state by heating the material to 140°F to 150°F and stirring until it returns to the liquid state.

SAFETY HANDLING:

Work in well-ventilated areas using gloves, eye protection and clothing protection. Avoid contact to the skin and eyes. Avoid clothing contamination. Wash thoroughly after handling. These products may cause skin and respiratory allergic reactions. Consult Safety Data Sheets for complete precautions with this product.

Jamestown Distributors 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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