

## TECHNICAL DATA BULLETIN

### SYNTACTIC TOOLING BOARD ADHESIVE SYSTEM

## 646A RESIN / 646B HARDENER

CPD 646A resin with CPD 646B hardener is a room temperature syntactic tooling board adhesive system with excellent wetting and bonding characteristics. Other key features of the product are high dimensional stability and toughness.

#### HANDLING PROPERTIES

	<u>VALUE</u>	<u>TEST METHOD</u>
Mix Ratio by Weight	100A: 14B	Calculated
Mixed Viscosity at 25°C, cP	3,000	ASTM D21 96
Pot Life at 25°C, 300g mass, minutes	20	
Tack Free Time at 25°C, hours	4	
Cure Time at 25°C, hours	12	

#### MIXING INSTRUCTIONS:

Part A contains fillers that are lighter than the resin. The lightweight fillers will rise to the surface of the resin. These ingredients must be thoroughly mixed before combining part A with part B. The use of a mechanical mixer is desirable. Once part A has been thoroughly mixed add part B and thoroughly mix again.

**SYSTEM POST CURE OPTIONS:**

Select one of the following cure schedules depending on the available time, the physical properties of the master and the desired physical properties of the final part. Post cure the structure to obtain maximum physical properties from the system. Please contact technical service if you find it necessary to have a different post cure schedule.

**CURE INCREMENTS:**

	Option I	Option II
24 hrs. at 77°F (25°C)	X (S)	X (S)
7 days at 77°F (25°C)	X (U)	
4hrs. at 150°F (66°C)		X(U)

S = Supported

U = Unsupported

**TOOL, MOLD AND/OR PATTERN PREPARATION:**

Wood structures should be sealed. Gypsum molds should be dried to remove free moisture and preferably sealed with the PFP process or appropriate sealer. All non-porous tools, molds or patterns should be treated with release or parting agents, which can withstand the temperature that the part will be cured at while remaining in a supported position.

**STORAGE AND HANDLING:**

Store at 60-100°F in a dry place. After use, tightly reseal. (This product may crystallize during storage. If crystallized, vent container and heat to 125-145°F until crystals dissolve. Stir well after product has liquefied.) Always use clean dry tools for mixing and applying. Mix according to the mix ratio stated for the specific product as listed on the front page. Mix together thoroughly and use immediately. Material temperatures should not be below 65°F when mixing.

**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 Material Safety Data Sheets for complete precautions with this product.

**Endurance Technologies, Inc. is not a patternmaker. We have experience only in the compounding of resins, not in the actual manufacture of the tools or patterns. Each part 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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Revised December 2007

