

STAR Technology

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524-01

Epoxy Casting System

DESCRIPTION

STAR Technology 524-01 is a silicon carbide filled, room temperature curing casting system used to produce an abrasion resistant surface. Fast hardeners, like 524-01 are made for surface cast up to 1/2 inch in depth. It gives accurate reproduction of detail and has very little settling of contents in the can. When determining the maximum depth of a pour factors to appraise include the configuration of the cast and the thermal conductance of the master. Typical applications for STAR TECH 524-01 include metal stretch forming tools, drop hammer dies, hydroform dies, core boxes, foundry patterns and fixtures.

BENEFITS

Exceptional wear resistance
Low shrinkage

Longer tool life
Fast design changes

TYPICAL PROPERTIES (cured 7 days at 75°F)

		<u>TEST METHOD</u>	<u>VALUE</u>
Mix Ratio, Resin to Hardener	Parts by Weight		100:10
	Parts by Volume		100:14.7
Mixed Viscosity (centipoise)		ASTM D2393	15,500
Density (lbs./cu.ft.)			85.4
(lbs./gal.)		ASTM D1475	11.4
Pot Life at 75°F (minutes)		ASTM D2471	45 to 60
Demolding Time (hours)			16
Cure time at 75°F (days)			7
Color			Grey
Shore Hardness (D)		ASTM D2240	87
Tensile Strength (psi)		ASTM D638	3,800
Flexural Strength (psi)		ASTM D790	6,100
Flexural Modulus (psi)		ASTM D790	439,000
Maximum Service Temperature (°F)			180

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APPLICATION PROCEDURES

Carefully weigh out appropriate amounts of resin and hardener into a clean mixing container and thoroughly mix until all streaks and striations are gone. Scrape the sides and bottom frequently to insure complete mixing. Pour the mixed material in the thinnest stream possible into a single spot of the mold cavity or in the sprue holes as desired. Allow the mixture to flow slowly over the mold surface or into the sprue hole to help eliminate air entrapment.

CAUTION: Unmixed compound from the sides or bottom of the container can cause soft spots or uncured areas in the completed casting. To prevent this, transfer the entire mixed contents to a second clean container and remix for a short time before using.

PRECAUTIONS

For industrial use only. Keep away from children.

Refer to the Safety Data Sheets (SDS forms) pertaining to this product before using.

Avoid contact with skin or eyes. In the event of an eye splash or contact, immediately flush with cold water for 15 minutes and contact a physician. If skin contact occurs, wash with mild soap and water. The wearing of safety glasses with side shields and impervious gloves is recommended.

RESIN WARNING STATEMENT

Warning! Causes irritation. May cause allergic skin reaction. Avoid all contact with skin, eyes, and clothing. Wash thoroughly after handling.

HARDENER WARNING STATEMENT

Danger! Corrosive. Causes burns to eye and skin. May cause allergic skin and/or respiratory reaction or sensitization. Do not get in eyes, on skin or clothing. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

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