

# STAR Technology

FORMULATING • INNOVATIVE • SOLUTIONS

## 503-01

### Epoxy Surface Coat

#### DESCRIPTION

STAR Technology 503-01 is a gray, room temperature cure, aluminum filled surface coat. Its excellent thixotropy allows for non-sag on a vertical surface. 503-01 provides excellent reproductions of surface detail. It has exceptional handling properties, going on smoothly and evenly, with no drag on the brush. When choosing any surface coat, consideration should be given to tool size, configuration, build method, and final use. Surface coat thickness of 0.030" is considered average for room temperature applications. 503-01 should be backed with a laminate using a STAR room temperature laminating system such as 510-01 or 511-01. Typical applications for 503-01 include prototypes, master models, trim fixtures, duplication splashes, Keller models, holding fixtures, patterns, and core boxes.

#### BENEFITS

Excellent room temperature properties	No sag on a vertical surface
Excellent dimensional stability	Accurate reproduction of detail

#### TYPICAL PROPERTIES

	<u>TEST METHOD</u>	<u>VALUE</u>
Mix Ratio, Resin to Hardener Parts by Weight		100:11
Parts by Volume		100:16
Mixed Viscosity (centipoise)	ASTM 2393	164,000
Density (lbs./cu.in.)	ASTM 1475	.0507
(lbs./gal.)		12.00
Pot Life at 750F (minutes)	ASTM 2471	50 to 60
Color		Grey
Cure Time at 750F (days)		7
Shore Hardness (D)	ASTM 2240	86
Tensile Strength (psi)	ASTM D638	6,500
Flexural Strength (psi)	ASTM D 790	2,000
Flexural Modulus (psi)	ASTM D790	150,000
Compressive Ultimate Strength (psi)	ASTM D695	11,000
Maximum Service Temperature (OF)		180

#### 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 ensure complete mixing.

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

To the best of our knowledge, the information contained herein is accurate. However, STAR TECHNOLOGY, Inc., does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. The information contained herein is considered typical properties and is not intended to be used as specifications for our products. This information is offered solely to assist purchaser in selecting the appropriate products for purchaser's own testing. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein and in the material safety data sheet, we cannot guarantee that these are the only hazards that exist. Repeated and prolonged exposure to epoxy resins can cause sensitization or other allergic responses.



# STAR Technology

FORMULATING • INNOVATIVE • SOLUTIONS

## 503-01 Epoxy Surface Coat

### PRECAUTIONS

For industrial use only. Keep away from children.

Refer to the Material Safety Data Sheets (MSDS 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.

To the best of our knowledge, the information contained herein is accurate. However, STAR TECHNOLOGY, Inc., does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. The information contained herein is considered typical properties and is not intended to be used as specifications for our products. This information is offered solely to assist purchaser in selecting the appropriate products for purchaser's own testing. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein and in the material safety data sheet, we cannot guarantee that these are the only hazards that exist. Repeated and prolonged exposure to epoxy resins can cause sensitization or other allergic responses.