

STAR Technology

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ER2160 Series Abrasion Resistant Coating

DESCRIPTION

ER2160 is a silicon carbide filled, room temperature curing surface coat used to produce an abrasion resistant surface. When used with ER2165 as a base coat, as ER2160 erodes, ER2165 becomes visible indicating that the part is still protected but needs to be reworked. The ER2160 Series is a creamy consistency, which makes it easy to apply without sag or run off on vertical surfaces and over sharp radii. 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. Typical applications for the ER2160 Series include pump casings, volutes, bins, silos, impellers and blades.



BENEFITS:

Room Temperature Cure
Chemical Resistant

Corrosion Resistant
Brush Application

TYPICAL PROPERTIES

	<u>TEST METHOD</u>	<u>VALUE</u>
Mix Ratio (by weight):		100A: 14.5B
Viscosity (cps):		
Part A:	ASTM D2393	700,000
Part B:	ASTM D2393	100
Density (g/cm ³):		
Part A:	ASTM D1475	2.00
Part B:	ASTM D1475	1.01
Mixed:	ASTM D1475	1.77
Color:		
ER2160:		Black
ER2165:		Grey
Shore D Hardness:	ASTM D2240	85
Gel Time [200 g mass] (minutes):		100
Cure Time [After Gel] [70°C] (hours):		4
Room Temperature Cure Time (days):		7

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.

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Surface Preparation

Proper surface preparation is crucial to the long-term performance of ER2160. Requirements will vary with the severity of the application, expected service life and initial substrate conditions.

1. Clean, dry and abrade application surface. The more thorough the surface preparation the better the performance of ER2160. If possible, the surface should be grit blasted to a Near-White Metal (SSPC-SP 10/NACE No. 2) standard. For less severe applications of mechanical abrasion of the surface with hand tools is suitable.
2. Solvent cleaning with a residue-free solvent is recommended as the final step to aid in adhesion.

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.

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 AND HARDENER WARNING STATEMENT

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

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