

# STAR Technology

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## ER2165

### Abrasion Resistant Coating

#### DESCRIPTION

ER2165 is a silicon carbide filled, room temperature curing surface coat used to produce an abrasion resistant surface. ER2165 has 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 ER2165 include pump casings, bins, silos, impellers and blades.

#### BENEFITS:

|                       |                     |
|-----------------------|---------------------|
| Room Temperature Cure | Corrosion Resistant |
| Chemical 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 <sup>3</sup> ):         |                    |              |
| Part A:                               | ASTM D1475         | 2.00         |
| Part B:                               | ASTM D1475         | 1.01         |
| Mixed:                                | ASTM D1475         | 1.77         |
| Color:                                |                    |              |
| Part A:                               |                    | Gray         |
| Part B:                               |                    | Clear        |
| Mixed:                                |                    | Gray         |
| 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            |



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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 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.