

# Product Datasheet: ARC 855(E)

# 100% solids, ceramic reinforced, thin film coating to protect metal against chemicals, abrasion, and corrosion. ARC 855(E) industrial coating is designed to:

- Upgrade new and old equipment exposed to abrasion, corrosion or chemical attack
- Replace traditional coatings, special alloys, engineered plastics, ceramics, etc.
- Easily apply by roller or brush

#### **Application Areas**

- Pump Casings
- Bins and Silos
- Impellers and bladesHeat Exchangers
- HoppersWaterboxes
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## Packaging and Coverage

ARC 855(E) requires a minimum of two coats

Nominal, based on a 750  $\mu m$  (30 mil) thickness

- 0.75 liter kit covers 0.98 m<sup>2</sup> (10.60 ft<sup>2</sup>)
- 1.5 liter kit covers 2.00 m<sup>2</sup> (21.53 ft<sup>2</sup>)
- 5 liter kit covers 6.67 m<sup>2</sup> (71.76 ft<sup>2</sup>)

 16 liter kit covers 21.33 m<sup>2</sup> (229.63 ft<sup>2</sup>) Note: Components are pre-measured & pre-weighed.
 Each kit includes mixing and application instructions.
 0.75 liter, 1.5 liter & 5 liter kits include tools.

Colors: Black or gray



Transport Screws

Valves

Tanks and Vessels



#### **Features and Benefits**

- Abrasion resistant surface
  Extends equipment life
- Reduces spare parts
- Reduces downtime
- High gloss, low drag surface
  Improves material flow
  - Enhances efficiency
- High adhesive strength
- Prevents under-film corrosion
- 100% solids; no VOCs; no free isocyanates
  - Enhances safe use
  - No shrinkage on cure
  - Resists permeation
- Low viscosity, thin film, brush or roller applied coating
  - Easy to apply
  - Saves repair time

### **Technical Data**

| Composition Matrix   | A two component, modified epoxy resin reacted with an aliphatic curing agent      |                                 |                                 |
|--|---|---------------------------------|---------------------------------|
| Reinforcement  | A proprietary blend of ceramic particles providing smooth, wear resistant surface |                                 |                                 |
| Cured Density  |   | 1.8 g/cc                        | 112 lb/ cu.ft.                  |
| Compressive Strength   | (ASTM D 695)  | 913 kg/cm² (89.6 MPa)           | 13,000 psi                      |
| Flexural Strength  | (ASTM D 790)  | 577 kg/cm² (56.5 MPa)           | 8,200 psi                       |
| Pull-Off Adhesion  | (ASTM D 4541)   | 415 kg/cm² (40.7 MPa)           | 5,900 psi                       |
| Tensile Strength   | (ASTM D 638)  | 295 kg/cm² (28.9 MPa)           | 4,200 psi                       |
| Linear Coefficient of Thermal Expansion                        | (ASTM C 531)  | 5.5 x 10 <sup>-5</sup> cm/cm/°C | 3.1 x 10 <sup>-5</sup> in/in/°F |
| Composite Shore D Durometer Hardness                           | (ASTM D 2240)   | 88                              |                                 |
| Vertical Sag Resistance,<br>at 21°C (70°F) and 0.38 mm (.015") |   | No sag                          |                                 |
| Maximum Temperature<br>(Dependent on service)                  | Wet Service<br>Dry Service  | 65°C<br>120°C                   | 149°F<br>248°F                  |
| Shelf life (unopened containers)                               | 3 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]     |                                 |                                 |

Form No. EN-084957EU



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