# Product Datasheet: ARC 855



## 100% solids, ceramic reinforced, thin film coating to protect metal against chemicals, abrasion, and corrosion. ARC 855 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 blades
- Heat Exchangers
- Hoppers
- Waterboxes
- Tanks and Vessels

Valves

Transport Screws

- Packaging and Coverage
- ARC 855 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> (10.6 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





### **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		1.6 g/cc	100 lb/ cu.ft.
Compressive Strength	(ASTM D 695)	840 kg/cm² (82.7 MPa)	12,000 psi
Flexural Strength	(ASTM D 790)	560 kg/cm² (54.2 MPa)	8,000 psi
Pull-Off Adhesion	(ASTM D 4541)	352.7 kg/cm² (34.6 MPa)	5,020 psi
Tensile Strength	(ASTM D 638)	240 kg/cm² (23.4 MPa)	3,400 psi
Linear Coefficient of Thermal Expansion	(ASTM C 531)	4.6 x 10 <sup>-5</sup> cm/cm/°C	2.6 x 10⁻⁵ in/in/°F
Cathodic Disbondment	(ASTM G 8)	Passes 60 days	
Composite Shore D Durometer Hardness	(ASTM D 2240)	85	
Salt fog - scored panels	(ASTM B 117)	No rust > 10,000 hours	
Vertical Sag Resistance, at 21°C (70°F) and 0.38 mm (.015")		No sag	
Maximum Temperature (Dependent on service)	Wet Service Dry Service	65°C 120°C	149°F 248°F
Shelf life (unopened containers)	2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]		



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