

## FDA compliant, thin film, corrosion resistant barrier coating

ARC S3 is suited for corrosive applications including those where direct food contact exposures is a requirement. This ceramic reinforced, 100% solids coating is tough enough to perform in both static and erosive flow conditions and complies with 21 CFR 175.300 for direct food contact exposures.

S3 is designed to:

- Provides excellent barrier protection against erosion, corrosion, and chemical attack.
- Easily applied by brush, roller, or spray.
- Suited for direct food contact exposures in compliance with 21 CFR 175.300 - Resinous and polymeric coatings.

### Application Areas

- Storage tanks
- Structural steel
- Rail cars
- Process equipment
- Conveyors
- Chutes

### Packaging and Coverage

Nominal based on 375 µm (15 mil) DFT

- 940 ml cartridge covers 2.5 M<sup>2</sup> (27 ft<sup>2</sup>)
- 5-liter kit covers 13.33 M<sup>2</sup> (143.5 ft<sup>2</sup>)
- 16-liter kit covers 42.7 M<sup>2</sup> (459.3 ft<sup>2</sup>)

Note: Components are pre-measured and pre-weighed to correct mix ratio.

Each kit contains Part A&B, mixing and application tools and application instructions

Color: White or blue



### Features and Benefits

- Ceramic reinforcement resists erosion
- Spark testable for pinhole free verification
- Complies to 21 CFR 175.300 Condition B&C
  - Acidic solution ≤pH5
  - Aqueous (acid/non-acid)
  - Dairy and bakery products
  - Oils and fats, dry solids

### Technical Data

Composition	Matrix	A modified epoxy resin reacted with an aliphatic amine curing agent	
	Reinforcement	Propriety blend of fine ceramic reinforcements	
Cured Density		1.59 g/cc	13.3 lbs./gallon
Compressive Strength	(ASTM D 695)	1019 kg/cm <sup>2</sup> (100 MPa)	14,500 psi
Tensile Adhesion	ASTM D4541	309 kg/cm <sup>2</sup> (30.3 MPa)	4,400 psi
Flexural Strength	ASTM D790	619 kg/cm <sup>2</sup> (60.7 MPa)	8,800 psi
Flexural Modulus	ASTM D790	7.45 x 10 <sup>4</sup> Kg/cm <sup>2</sup> (7308 MPa)	10.6 x 10 <sup>5</sup> psi
Tensile Strength	ASTM D638	295 kg/cm <sup>2</sup> (29 MPa)	4,200 psi
Tensile Elongation	ASTM D2370	4.7%	4.7%
Impact Resistance	ASTM D2794	>217 N-m	>160 in pounds
Taber Wear	ASTM D4060 (CS17/1kg/1000)		23 mg
Shore D Durometer Hardness	ASTM D2240		88
Maximum Temperature (Dependent on service)	Wet Service	52°C	125°F
	Dry Service	74°C	165°F
Shelf Life (unopened containers)	2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]		