

Abrasion Resistant Coating for Fine Particle Wear

ARC MX FG is a trowel applied 100% solids, zero VOC, ceramic reinforced epoxy coating designed for protecting surfaces against dry and wet slurry abrasive flow. This two part system complies to 21 CFR 175.300 and is suited for direct food contact.

ARC MX FG is designed to:

- Protect metal surfaces from extreme sliding-wear and abrasion caused by fine particles
- Restore worn equipment to near original condition
- Provide a longer lasting alternative to rubber linings and ceramic wear tiles
- Resist a broad pH spectrum
- Easily apply by trowel

Application Areas

- Cyclones
- Valves
- Hopper bins
- Transport screws
- Wear plates
- Slurry pumps
- Agitators
- Mixers
- Cleaner cones
- Pipe spools
- Pipe elbows
- Pulverizers

Packaging and Coverage

Nominal, based on a 3 mm (120 mil) thickness

- 1.5 liter kit covers 0.5 m² (5.4 ft²)
- 5 liter kit covers 1.67 m² (18 ft²)
- 16 liter kit covers 5.34 m² (57.5 ft²)

Note: Components are pre-measured & pre-weighed.

Each kit includes mixing and application instructions.

Color: White



Features and Benefits

- **Tough, ceramic reinforced coating resists broad range of slurries**
 - Extends life of equipment exposed to fine particle wear
- **Complies to 21 CFR 175.300 for Condition C and less severe exposures for:**
 - Type II – Acidic (pH 5.0 or below), aqueous products; may contain salt or sugar or both, including oil-in-water emulsions of low or high fat content food.
 - Type III – Aqueous, acid or nonacid products containing free oil or fat; may contain salt, and including water-in-oil emulsions of low or high fat content.
 - Type IVA – Dairy products and modifications: Water in oil emulsion, high or low fat.
 - Type IVB – Dairy products and modifications: Oil in water emulsion, high or low fat.
 - Type V – Low moisture fats and oils, Condition C.
 - Type VIII – Dry solid foods.

Technical Data

Composition	Matrix	A modified epoxy resin reacted with an aliphatic amine curing agent	
	Reinforcement (<i>Proprietary</i>)	Blend of medium and fine particle size, high purity Al ₂ O ₃ ceramic beads and powders, pretreated with polymeric coupling agent	
Cured Density		2.48 g/cc	155 lb/ cu.ft.
Compressive Strength	(ASTM D 695)	752 kg/cm ² (73.7 Mpa)	10700 psi
Flexural Strength	(ASTM D 790)	457 kg/cm ² (44.8 Mpa)	6500 psi
Pull-Off Adhesion	(ASTM D 4541)	>211 kg/cm ² (>20.7 Mpa)	>3000 psi
Tensile Strength	(ASTM D 638)	147.6 kg/cm ² (14.5 Mpa)	2100 psi
Impact Resistance (Reverse)	(ASTM D 2794)	4.52 N-m	40 in-lbs.
Slurry Abrasion Resistance	(ASTM G75)	2909	
Shore D Durometer Hardness	(ASTM D 2240)	85	
Vertical Sag Resistance at 21°C (70°F)	(ASTM D 4400)	5 mm No Sag	0.2 in No Sag
Maximum Temperature (Dependent on service)	Wet Service Dry Service	65°C 130°C	149°F 266°F
Shelf life (unopened containers)	2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]		