

# **Product Datasheet: ARC MX FG**

## **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 slidingwear and abrasion caused by fine particles
- Restore worn equipment to near original condition

## **Application Areas**

Cyclones

Hopper bins

Transport screws

- Valves
- Slurry pumpsAgitators
  - Mixers

Wear plates

## **Packaging and Coverage**

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

- 1.5 liter kit covers 0.5 m<sup>2</sup> (5.4 ft<sup>2</sup>)
- 5 liter kit covers 1.67 m<sup>2</sup> (18 ft<sup>2</sup>)
- 16 liter kit covers 5.34 m<sup>2</sup> (57.5 ft<sup>2</sup>)

Note: Components are pre-measured & pre-weighed. Each kit includes mixing and application instructions.

Color: White

#### **Technical Data**

A modified epoxy resin reacted with an aliphatic amine curing agent Composition Matrix Blend of medium and fine particle size, high purity Al<sub>2</sub>O<sub>2</sub> ceramic beads and powders, pretreated with Reinforcement (Proprietary) polymeric coupling agent **Cured Density** 2.48 g/cc 155 lb/ cu.ft. **Compressive Strength** (ASTM D 695) 752 kg/cm<sup>2</sup> (73.7 Mpa) 10700 psi **Flexural Strength** (ASTM D 790) 457 kg/cm<sup>2</sup> (44.8 Mpa) 6500 psi **Pull-Off Adhesion** >211 kg/cm<sup>2</sup> (>20.7 Mpa) (ASTM D 4541) >3000 psi **Tensile Strength** (ASTM D 638) 147.6 kg/cm<sup>2</sup> (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 Wet Service 65°C 149°F (Dependent on service) 130°C 266°F Dry Service 2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility] Shelf life (unopened containers)



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 Provide a longer lasting alternative to rubber linings and ceramic wear tiles

- Resist a broad pH spectrum
- Easily apply by trowel
  - Cleaner cones
  - Pipe spools
  - Pipe elbows
  - Pulverizers



## **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 reflect results of laboratory tests and are intended to indicate general characteristics only. Since many actual application circumstances are beyond Chesterton's knowledge and/or control, the product user must determine the suitability of the products it intends to use for its particular purpose and assume all risks and liabilities in connection therewith. CHESTERTON DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.