**Product Datasheet: ARC MX1**

**100% solids, ceramic reinforced, multi-component hybrid system, formulated for extreme sliding-wear, abrasion and impact caused by medium to coarse particle flow.** ARC MX1 industrial coating is designed to:

- Protect surfaces against dry coarse particle erosion, wet slurry abrasion and impact
- Provide a longer lasting alternative to rubber linings and ceramic wear tiles
- Restore worn equipment to near original condition
- Replace CD4, ni-hard or hardox as wear resistant material
- Easily apply by trowel

**Application Areas**

- Pulverizers
- Dredge pumps
- Hoppers & silos
- Conveyor screws
- Pumps & pipe elbows
- Fans/blowers/cyclones
- Slurry pumps
- Ceramic tile deflector hoods
- Slurry pipelines
- Fan housings
- Ceramic tile lined chutes
- Rubber lined deflector hoods

**Packaging and Coverage**

Nominal, based on a 6 mm (240 mil) thickness

- **6 kg kit covers 0.37 m² (3.97 ft²)**
  - Contains:
    - 1 x MXP (primer) part A & B
    - 1 x MX1 (top coat) part A & B
    - 1 MX (ceramic reinforcement) part C

- **20 kg kit covers 1.23 m² (13.23 ft²)**
  - Contains:
    - 1 x MXP (primer) part A & B
    - 1 x MX1 (top coat) part A & B
    - 1 MX (ceramic reinforcement) part C

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

Color: Blue

**Technical Data**

<table>
<thead>
<tr>
<th>Composition Matrix</th>
<th>A modified hybrid epoxy resin reacted with an aliphatic amine curing agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinforcement</td>
<td>Proprietary blend of high purity Al₂O₃ and SiC, pretreated with polymeric coupling agent</td>
</tr>
<tr>
<td>Cured Density</td>
<td>2.6 g/cc 163 lb/ cu.ft.</td>
</tr>
<tr>
<td>Compressive Strength (ASTM C 579)</td>
<td>752 kg/cm² (73.7 MPa) 10,700 psi</td>
</tr>
<tr>
<td>Flexural Strength  (ASTM C 580)</td>
<td>352 kg/cm² (34.4 MPa) 5,000 psi</td>
</tr>
<tr>
<td>Pull off Adhesion  (ASTM D 4541)</td>
<td>224.8 kg/cm² (22.1 MPa) 4,200 psi</td>
</tr>
<tr>
<td>Tensile Strength   (ASTM C 307)</td>
<td>265 kg/cm² (25.9 MPa) 3,770 psi</td>
</tr>
<tr>
<td>Impact Resistance (Direct) (ASTM D 2794)</td>
<td>67.7 N·m &gt; 50 ft-lbs.</td>
</tr>
<tr>
<td>Shore D Durometer Hardness (ASTM D 2240)</td>
<td>89</td>
</tr>
<tr>
<td>Vertical Sag Resistance, at 21°C (70°F) and 6 mm (1/4&quot;)</td>
<td>No Sag</td>
</tr>
<tr>
<td>Maximum Temperature (Dependent on service)</td>
<td>Wet Service 95°C 203°F</td>
</tr>
<tr>
<td>Slurry Abrasion Response (SAR) (ASTM G 75)</td>
<td>1,780</td>
</tr>
<tr>
<td>Shelf life (unopened containers)</td>
<td>2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]</td>
</tr>
</tbody>
</table>

**Features and Benefits**

- Tough, ceramic reinforced coating resists broad range of slurries
  - Extends life of equipment exposed to coarse particle wear
- Advanced hybrid polymer matrix
  - Withstands broad pH range
  - Resists repeated high impact force
- 100% solids; no VOCs; no free isocyanates
  - Enhances safe use
  - Serves demanding applications
- High tack primer ensures surface bonding
  - Allows for vertical build capability to most substrates

**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, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Form No. 085564 ARC MX1 2015/8/25

© 2015 A.W. Chesterton Company

® Registered trademark owned and licensed by A.W. Chesterton Company in USA and other countries, unless otherwise noted.