

Chesterton ARC SD4i High temperature ceramic reinforced erosion resistant coating

Category : Polymer , Thermoset , Epoxy

Material Notes:

Description: An advanced ceramic composite for resurfacing and protection of metal surfaces in immersion service. It is normally applied in a thickness range of 250-370 microns (10-15 mils) per coat. Non-shrinking, 100% solids. ARC SD4i is formulated for the resurfacing of the metal components subjected to extreme corrosive or severe fluid flow conditions. ARC SD4i is a low viscosity composite that is designed to be spray applied but may also be applied by roller or brush. This product is designed as a two coat system to provide extended life for plant equipment. Cured ARC SD4i provides a high gloss ceramic surface with resistance to erosion-corrosion and permeation. **Benefits:** High loading of ceramic reinforcements extends equipment service life against wear Exceptional resistance to blistering and chemical attack during long term immersion conditions High gloss finish reduces drag, improves pump efficiency on worn components Tough resin structure resists thermal-mechanical shock Outstanding adhesion insures reliable performance against underfilm corrosion Convenient 2-1 volumetric mix ratio and verification of mix by color change. **Suggested Uses:** Vacuum Pumps Heat Exchangers Hoppers Tank Linings Valve Assemblies Raw Water Filters Valves Waterboxes Cooling Water Systems Pump Components Pressure Vessels Pipeline Coatings Condensers Pulp Dewatering Screws Information provided by Chesterton

Order this product through the following link:

http://www.lookpolymers.com/polymer_Chesterton-ARC-SD4i-High-temperature-ceramic-reinforced-erosion-resistant-coating.php

| Physical Properties | Metric | English | Comments |
|---------------------|-----------|---------------------------|----------|
| Density | 1.80 g/cc | 0.0650 lb/in ³ | Cured |

| Mechanical Properties | Metric | English | Comments |
|--------------------------------|----------------------|----------------------|--------------------------|
| Hardness, Shore D | 85 | 85 | ASTM D2240 |
| Tensile Strength at Break | 26.2 MPa | 3800 psi | ASTM D638 |
| Elongation at Break | 2.8 % | 2.8 % | ASTM D638 |
| Flexural Strength | 62.7 MPa | 9100 psi | ASTM D790 |
| Flexural Modulus | 6.07 GPa | 880 ksi | ASTM D790 |
| Compressive Strength | 90.3 MPa | 13100 psi | ASTM D695 |
| Adhesive Bond Strength | >= 13.8 MPa | >= 2000 psi | ASTM D4541 |
| Taber Abrasion, mg/1000 Cycles | 260 @Load 1.00 kg | 260 @Load 2.20 lb | H-18, (loss); ASTM D4060 |

| Thermal Properties | Metric | English | Comments |
|----------------------------------|---------|---------|-------------|
| Maximum Service Temperature, Air | 65.0 °C | 149 °F | Wet Service |

| Thermal Properties | 120 °C Metric | 248 °F English | Dry Service Comments |
|------------------------------|----------------------|----------------------|-------------------------|
| Processing Properties | Metric | English | Comments |
| Cure Time | 60.0 min | 1.00 hour | Tack Free |
| | @Temperature 32.0 °C | @Temperature 89.6 °F | |
| | 180 min | 3.00 hour | Tack Free |
| | @Temperature 25.0 °C | @Temperature 77.0 °F | |
| | 240 min | 4.00 hour | Tack Free |
| | @Temperature 16.0 °C | @Temperature 60.8 °F | |
| | 300 min | 5.00 hour | Light Load |
| | @Temperature 32.0 °C | @Temperature 89.6 °F | |
| | 360 min | 6.00 hour | Tack Free |
| | @Temperature 10.0 °C | @Temperature 50.0 °F | |
| | 600 min | 10.0 hour | Light Load |
| | @Temperature 25.0 °C | @Temperature 77.0 °F | |
| | 600 min | 10.0 hour | Overcoat End |
| | @Temperature 32.0 °C | @Temperature 89.6 °F | |
| | 840 min | 14.0 hour | Full Load |
| | @Temperature 32.0 °C | @Temperature 89.6 °F | |
| 1080 min | 18.0 hour | Light Load | |
| @Temperature 16.0 °C | @Temperature 60.8 °F | | |
| 1200 min | 20.0 hour | Overcoat End | |
| @Temperature 25.0 °C | @Temperature 77.0 °F | | |
| 1440 min | 24.0 hour | Light Load | |
| @Temperature 10.0 °C | @Temperature 50.0 °F | | |
| 1440 min | 24.0 hour | Full Load | |
| @Temperature 25.0 °C | @Temperature 77.0 °F | | |
| 1440 min | 24.0 hour | Full Chemical | |
| @Temperature 32.0 °C | @Temperature 89.6 °F | | |
| 1800 min | 30.0 hour | Overcoat End | |
| @Temperature 16.0 °C | @Temperature 60.8 °F | | |

| Processing Properties | 2400 min Metric | 40.0 hour English | Comments |
|-----------------------|----------------------|----------------------|---------------|
| | @Temperature 10.0 °C | @Temperature 50.0 °F | |
| | 2880 min | 48.0 hour | Full Load |
| | @Temperature 16.0 °C | @Temperature 60.8 °F | |
| | 2880 min | 48.0 hour | Full Chemical |
| | @Temperature 25.0 °C | @Temperature 77.0 °F | |
| | 3600 min | 60.0 hour | Full Load |
| | @Temperature 10.0 °C | @Temperature 50.0 °F | |
| | 5760 min | 96.0 hour | Full Chemical |
| | @Temperature 16.0 °C | @Temperature 60.8 °F | |
| | 7200 min | 120 hour | Full Chemical |
| | @Temperature 10.0 °C | @Temperature 50.0 °F | |

| Descriptive Properties | Value | Comments |
|------------------------|-------|----------|
| Color | Blue | |
| | Gray | |

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China