

## Chesterton ARC 855 Abrasion Control Liquid

Category : Ceramic , Polymer , Thermoset , Epoxy

### Material Notes:

**Description:** An advanced ceramic composite formulated to protect equipment from aggressive chemical attack, corrosion, and erosion. The product is a low viscosity composite that is easily applied by brush or roller. ARC 855 may be applied at a minimum thickness of 250 microns (10 mills) per coat. Non-shrinking. 100% Solids. ARC 855 may be used alone, or in conjunction with other ARC composites. This two-coat system provides extended wear and predictable preventative maintenance. The cured ceramic composite provides outstanding chemical and abrasion resistance with a high gloss finish.

**Benefits:** High gloss surface reduces drag, improves flow and pump efficiency  
Tough resin structure resists thermal-mechanical shock  
Outstanding adhesion insures reliable performance with no undercutting or under film corrosion  
Labor and downtime costs are reduced due to ease of application  
No heat curing required  
Performs well under fluctuating chemical environments

**Suggested Uses:** Fans & Housings  
Heat Exchangers  
Hoppers  
Hydropulpers  
Pump Casings  
Sand Filter Vessels  
Structural Steel  
Tanks and Vessels  
Volutes  
Wet Scrubbers  
Valves  
Coal Hoppers and Feeders  
Waterboxes  
Cooling Water Pumps  
Wear Plates  
Coal Screens  
Impellers  
Condensers  
Vacuum Pumps  
Pitted Tanks and Pipes  
Pulp Dewatering Screws

Information provided by Chesterton

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Chesterton-ARC-855-Abrasion-Control-Liquid.php](http://www.lookpolymers.com/polymer_Chesterton-ARC-855-Abrasion-Control-Liquid.php)

Physical Properties	Metric	English	Comments
Density	1.60 g/cc	0.0578 lb/in <sup>3</sup>	Cured

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	105	105	ASTM D785
Hardness, Shore D	85	85	ASTM D2240
Tensile Strength at Break	23.4 MPa	3400 psi	ASTM D638
Flexural Strength	55.2 MPa	8000 psi	ASTM D790
Compressive Strength	82.7 MPa	12000 psi	ASTM D695

Thermal Properties	Metric	English	Comments
CTE, linear	46.8 µm/m-°C	26.0 µin/in-°F	ASTM C531
Maximum Service Temperature, Air	12.0 °C	53.6 °F	Dry Service
	65.0 °C	149 °F	Wet Service

Processing Properties	Metric	English	Comments
Cure Time	120 min	2.00 hour	Tack Free
	@Temperature 32.0 °C	@Temperature 89.6 °F	

Processing Properties	240 min Metric	4.00 hour English	Comments
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	<b>360 min</b>	<b>6.00 hour</b>	<b>Light Load</b>
	@Temperature 32.0 °C	@Temperature 89.6 °F	
	<b>480 min</b>	<b>8.00 hour</b>	<b>Tack Free</b>
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	<b>600 min</b>	<b>10.0 hour</b>	<b>Overend Coat</b>
	@Temperature 32.0 °C	@Temperature 89.6 °F	
	<b>720 min</b>	<b>12.0 hour</b>	<b>Light Load</b>
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	<b>720 min</b>	<b>12.0 hour</b>	<b>Full Load</b>
	@Temperature 32.0 °C	@Temperature 89.6 °F	
	<b>960 min</b>	<b>16.0 hour</b>	<b>Tack Free</b>
	@Temperature 10.0 °C	@Temperature 50.0 °F	
	<b>1200 min</b>	<b>20.0 hour</b>	<b>Overend Coat</b>
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	<b>1440 min</b>	<b>24.0 hour</b>	<b>Light Load</b>
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	<b>1440 min</b>	<b>24.0 hour</b>	<b>Full Load</b>
	@Temperature 25.0 °C	@Temperature 77.0 °F	
	<b>1440 min</b>	<b>24.0 hour</b>	<b>Full Chemical</b>
	@Temperature 32.0 °C	@Temperature 89.6 °F	
	<b>1920 min</b>	<b>32.0 hour</b>	<b>Overend Coat</b>
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	<b>2160 min</b>	<b>36.0 hour</b>	<b>Light Load</b>
	@Temperature 10.0 °C	@Temperature 50.0 °F	
	<b>2520 min</b>	<b>42.0 hour</b>	<b>Overend Coat</b>
	@Temperature 10.0 °C	@Temperature 50.0 °F	
	<b>2880 min</b>	<b>48.0 hour</b>	<b>Full Load</b>
	@Temperature 16.0 °C	@Temperature 60.8 °F	
	<b>2880 min</b>	<b>48.0 hour</b>	

Processing Properties	Metric @ Temperature 25.0 °C	English @ Temperature 77.0 °F	Full Chemical Comments
	5760 min	96.0 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	
	7680 min	128 hour	Full Chemical
	@Temperature 10.0 °C	@Temperature 50.0 °F	

Descriptive Properties	Value	Comments
Color	Black	
	Gray	

## Contact Songhan Plastic Technology Co.,Ltd.

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