

## 122 Brushable Ceramic

### PRODUCT DATA SHEET

Typical Applications: Hoppers, Bins, Chutes, Pump Volutes, Fan Casings, Valves, Slurry Equipment, Mix Tanks, Condensers, Water Boxes, Jigs, Pump Rotating Elements, Pipe, Pipe Fittings, Filters, Discharge Doors, Cone Bottoms, Shakes, Conveyers, Spiral Separators, Flotation Cells

PRODUCT DATA

Rezorect 122 Brushable Ceramic is a true coating, brush applied, yielding a smooth high gloss surface. As it possesses maximum loading of specially sized and treated ceramic particles, Rezorect 122 Brushable Ceramic protects against entrained particulate abrasion and wearing surface abrasion. The combination of the ceramic reinforcement with the corrosion resistant epoxy resin alloy offers maximum performance in the areas of corrosion, abrasion, friction reduction and turn-around time.

While designed to be cured at ambient temperature, when practical, Rezorect 122 Brushable Ceramic may be post cured by several methods to accelerate complete cure, thus placing coated objects in service in a much shorter time. The non-sagging, non-shrinking properties permit application to vertical surfaces, cavities and intricate parts. When cured, it may be machined with tungsten carbide or diamond tools.

#### **ADVANTAGES**



- Only the highest quality resins and reinforcements are used to produce REZORECT materials, assuring the applicator of long lasting successful applications, when correctly applied.
- Will not sag or run when applied to vertical surfaces.
- 100% solids and will not shrink.
- Single coat applications are possible.
- Special resin alloy is highly effective in resisting thermal and mechanical shock.
- User friendly; 122 Rezorect Brushable Ceramic is easy to mix and apply, thereby reducing application time and returning equipment to service with shorter turnaround.
- Advanced adhesion properties assure long lasting protection without fear of undercutting or delamination

	Finish	Smooth	c ·	200°F (93°C) Immersed	350°F (177°C) Dry
TECHNICAL DATA (Simplified)	Color	Black	Service Temperature Limits		
	Components	Two (2)	Littints		
	Curing Mechanism	Chemical Reaction	Compressive Strength	ASTM D695 15,200 psi (1068 kg/cm²)	
	Sag Resistance	at 75°F (24°C) by .6 in (15mm) ThicknessNo Sag	Flexural Strength	ASTM D790 8,100 psi (570 kg/cm²)	
	Theoretical Coverage	at 1mm – 0.38 m²/per l kg of product	Tensile Strength	ASTM D638 3,700 psi (260 kg/cm²)	
	VOC	None	Abrasive Resistance	ASTM D4060 1,000 Cycles, 1,000 Grm load CS/10 wheel, Taber abraser, 108 mg wgt loss	
	Volume Solids	100%	Adhesive Tensile Shear	ASTM D1002 Steel 2,600 psi (182 kg/cm²) Concrete - Concrete Failure	

#### SURFACE PREPARATION Whenever possible abrasive blast to ASTM 4258 Std. Remove all surface **Note**: Coating success for floors is more likely CONCRETE successful if a vapor barrier was installed when contaminates and laitance, exposing clean uncontaminated concrete. If concrete was poured. abrasive blast cleaning is not possible, mechanical cleaning with hand or power tools is acceptable. Acid washing or chemical cleaning prior to application not recommended. If concrete is old, a "Pull Test" should be performed, ASTM D1002, with minimum pull achieved of 330 psi (21 kg/cm<sup>2</sup>)) before concrete failure. Abrasive blast all steel substrates to a standard meeting SSPC-10 (SA2.5) near **Note:** All pump casting surfaces to be coated, depending upon material exposure, should first be white finish. All other metals should be clean. All metals should have a 3-4 abrasive blasted, then heated to a minimum of 450° F METAL mils (75-100 microns) minimum (anchor pattern). When hand or power tool (232° C) for 12 hours and then reblasted to remove cleaning is the only method available, remove all foreign material and in the the surface oxidation that has formed. Prior to case of steel remove all mill scale. Following hand and power cleaning coating make sure all dust, oils and water are solvent wash prior to application of material to remove grease or oils. removed. Apply Rezorect 198 SUPER WET or DRY SURFACE PRIMER to concrete prior to the application. Rezorect 198 SUPER WET or DRY SURFACE PRIMER PRIMER may also be used on metals if the situation warrants. APPLICATION DETAILS Carefully open and stir contents of individual containers. The container Note: Working and cure times are based on temperature and mass. The higher the temperature marked Component (A) base is designed to hold the entire contents of the or the greater the mass, the shorter the working and Component (B) activator for mixing. If less than full containers will be used, cure time. Mix the base & activator by weight a ratio of 5 parts base and 1 part activator must be USED. thoroughly until color is uniform. The larger the batch, the longer the mix time. Mix no more than 3 minutes. Take a small amount of material and thoroughly wet the application substrate. After substrate is wet, begin to build to the desired thickness.

**SAFETY:** When handling or applying Rezorect 122 Brushable Ceramic always wear protective clothing, gloves, face shield and eye protection. Consult Material Safety Data Sheet (MSDS) for additional hygiene and safety information.

	continuous immersion service ten							
The absence of a percentage behind the chemical indicates maximum concentration.								
	ACIDS		OTHER					
	Acid cleaner for masonry	AMB	Aviation Gasoline	AMB				
	Benzene Sulfonic	200F° (93C°)	Brake Fluid	AMB				
	Carbonic	AMB	Bunker	200F° (93C°)				
	Citric	AMB	Crude Oil	200F° (93C°)				
	Fatty	150F° (66C°)	Diesel Oil	180F° (82C°)				
l H	Hydrochloric 37%	AMB	Deionized Water	AMB				
$\geq$	Maleic	AMB	Dibutyl	AMB				
Z	Oxalic	AMB	Dimethyl Phthalate	AMB				
<u> </u>	Phosphoric All	AMB	Ethyl Alcohol (Ethanol)	AMB				
Ļ	Stearic	AMB	Ethylene Glycol	200F° (93C°)				
			Gasohol	AMB				
CHEMICAL RESISTANCE	ALKALIS		Gasoline	AMB				
H	Ammonium Carbonate Sat	150F° (66C°)	Hydraulic Fluid/Oil	150F° (66C°)				
$\simeq$	Ammonium Hydroxide 29%	100F° (38C°)	Isopropyl Alcohol	AMB				
	Calcium Hydroxide	100F° (38C°)	Jet Fuel	AMB				
lack lac	Magnesium Carbonate Sat	100F° (38C°)	Kerosene	AMB				
$\sim$	Magnesium Hydroxide	100F° (38C°)	Methyl Alcohol (Methanol)	AMB				
II	Potassium Bicarbonate 50%	AMB	Naptha	AMB				
	Potassium Carbonate 50%	AMB	Salt Water	200F° (93C°)				
프	Potassium Hydroxide Sat	AMB	Sewage (Human Waste)	200F° (93C°)				
工	Sodium Bicarbonate Sat	100F° (38C°)	Skydrol	AMB				
$\mathbf{C}$	Sodium Carbonate Sat	100F° (38C°)	Styrene	AMB				
	Sodium Hydroxide 10%	100F° (38C°)	Toluene	AMB				
	Sodium Hydroxide 50%	AMB	Turpentine	AMB				
			VM&P Naphtha	AMB				
	BLEACHES		Xylene	AMB				
	Chlorine Water Sat	150F° (66C°)						
	Sodium Hypochlorite 15%	AMB						
				AMB = Ambient				

When restoring the surface of such items as a pump volute, do not apply more material than necessary to make a smooth continuous surface. Reduction of the coating thickness is much easier when the coating is applied than after the very hard and abrasive resistant coating is cured. After desired thickness is achieved, allow material to gel, firm to touch. Although coating has gelled, it will remain tacky. If accelerated curing is desired after the "firm gel" stage has been reached, the complete object (e.g. pump shaft) may be heated or hot air may be directed onto the coating surface. Complete cure can be achieved in two (2) hours at 150°F (66°C). *Note:* Applying heat to ungelled coating can result in premature gelation prior to complete crosslinking of the coating, which may result in coating failure.

#### APPLICATION DATA

Apply to abrasive blasted metals & concrete (use Rezorect 198 Super Wet or Dry Primer with concrete).

Mixing Ratio by Weight: 5 parts base to 1 part activator *Note:* Carefully mix separate components before adding together.

Application Method:

Brush (preferred)

Roller

Trowel/spatula

Pot Life: 20-30 minutes at 75°F (24°C)
Minimum Thickness Per Coat: 15 mils (.381mm)
Minimum Coats: Two
Recoat: When gelled
Maximum Recoat Window Between Coats: If time exceeds six (6) hours, surface of coating must be abraded.

Drying Time: ASTM D1640 at 50-90% RH

Dry to	90°F (32°C)	70°F (21°C)	50°F (10°C)	35°F (2°C)
Touch	3 Hr	6 Hr	9 Hr	30 Hr

**CLEAN UP:** Thoroughly clean all tools and utensils upon completion of application with acetone or methyl ethyl ketone.

**Note:** These solvents will remove natural oils from the skin, always wear solvent resistant gloves.

**PACKAGING:** Rezorect 122 Brushable Ceramic is available in the following package sizes:

1 kg Kit packaged 6 Kits per / case

**STORAGE:** Shelf life in tightly sealed containers is one year when stored at 90°F (32°C), not in sunlight. When stored at 35°F (2°C) to 50°F (10°C) shelf life will be increased.

**SAFETY:** When handling or applying Rezorect 122 Brushable Ceramic always wear protective clothing, gloves, face shield and eye protection. Consult Material Safety Data Sheet (MSDS) for additional hygiene and safety information.

#### >>DISCLAIMER<<

The information and recommendations set forth herein are presented in good faith and believed to be correct and reliable. Glassflake International Inc. makes no representation as to the completeness or accuracy thereof and supplies information upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to use.

# Rezorect

Glassflake International Inc. 6525 Greenland Road Jacksonville, FL 32258 (904) 268-4000 FAX (904) 268-3197 www.rezorect.com