


Typical Applications: Ideal material for repairing metal parts subjected to high shock loads or extreme pressures

PRODUCT DATA	<p>Rezorect 134 Mighty Metal is the hardest and toughest epoxy alloy metal repair on the market. It boasts high compressive strengths in excess of 20,000 psi when cured at ambient temperatures, after 7 days, or in excess of 25,000 psi when post cured for 4 hours.</p> <p>Rezorect 134 Mighty Metal is the ideal material for repairing metal parts subjected to high shock loads or extreme pressures. Post curing not only increases compressive strength but also enables repaired objects to be returned to service in a relatively short period of time. The special metal alloy filler makes the material strong and hard and the use of tungsten carbide or diamond tooling is required for machining.</p> <p>Its non-sagging, non-shrinking properties permit application to vertical surfaces, cavities and intricate rotating parts.</p>
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ADVANTAGES	<ul style="list-style-type: none"> • Only the highest quality resins and reinforcements are used to produce Rezorect materials, assuring long lasting successful applications, when correctly applied. • Will not sag or run when applied to vertical surfaces. • 100% solids and will not shrink. • When used for non-corrosion service, single coat applications are possible. • Specially treated and sized reinforcements create a smooth and continuous hard surface. • User friendly material is easy to mix and apply, reducing application time and returning equipment to service with shorter turnaround. • Long lasting repairs to ferrous metals. • Advanced adhesion properties assure long lasting protection without fear of undercutting or delamination.
 <p>Easy-to-apply, brush-on prime coat</p>	

TECHNICAL DATA (Simplified)	Finish	Smooth	Service Temperature Limits	200°F (93°C) Immersed	350°F (177°C) Dry
	Color	Gray		Compressive Strength	Ambient Cure
	Components	Two (2)	Post Cure		ASTM D695 >25,000 psi (>1758 kg/cm ²)
	Curing Mechanism	Chemical Reaction	Flexural Strength	ASTM D790 7,300 psi (513 kg/cm ²)	
	Sag Resistance	at 75°F (24°C) by 1/4 in (6 mm) Thickness--No Sag	Tensile Strength	ASTM D638 5,400 psi (379 kg/cm ²)	
	Theoretical Coverage	at 40 mils, 4 sf/1 kg of product	Abrasive Resistance	ASTM D4060 1,000 Cycles, 1,000 Grm load CS/10 wheel, Taber abraser, 68 mg wgt loss	
	VOC	None	Adhesive Tensile Shear	ASTM D1002 Steel 2,600 psi (182 kg/cm ²) Concrete - Concrete Failure	
	Volume Solids	100%			

APPLICATION DATA

SURFACE PREPARATION		
CONCRETE	Whenever possible abrasive blast to ASTM 4258 Std. Remove all surface contaminants and laitance, exposing clean uncontaminated concrete. If 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 D-1002, with minimum pull achieved of 330 psi (21 kg/cm ²) before concrete failure.	<i>Note:</i> Coating success for floors is more likely if a vapor barrier was installed when concrete was poured.
METAL	Abrasive blast all steel substrates to a standard meeting SSPC-10 (SA2.5) near white finish. All other metals should be clean. All metals should have a 3-4 mils (75-100 microns) minimum (anchor pattern). When hand or power tool cleaning is the only method available, remove all foreign material and in the case of steel remove all mill scale. Following hand and power cleaning solvent wash prior to application of material to remove grease or oils.	<i>Note:</i> All pump casting surfaces to be coated, depending upon material exposure, should first be abrasive blasted, then heated to a minimum of 450° F (232° C) for 12 hours and then reblasted to remove the surface oxidation that has formed. Prior to coating make sure all dust, oils or water are removed.
PRIMER	Apply Rezorect 98 SUPER WET or DRY SURFACE PRIMER to concrete prior to the application. Rezorect 198 SUPER WET or DRY SURFACE PRIMER may also be used on metals if the situation warrants.	
APPLICATION DETAILS	Carefully open and stir contents of individual containers. The container marked Component (A) base is designed to hold the entire contents of the Component (B) activator for mixing. If less than full containers will be used, a ratio of 4 parts B and 1 part A must be USED.	<i>Note:</i> Working and cure times are based on temperature and mass. The higher the temperature or the greater the mass, the shorter the working and cure times. Mix the base & activator by weight 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 134 Mighty Metal always wear protective clothing, gloves, face shield and eye protection. Consult Material Safety Data Sheet (MSDS) for additional hygiene and safety information.

Maximum continuous immersion service temperature (°F) (°C) The absence of a percentage behind the chemical indicates maximum concentration.				
CHEMICAL RESISTANCE	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°)
	Hydrochloric 37%	AMB	Deionized Water	AMB
	Maleic	AMB	Dibutyl	AMB
	Oxalic	AMB	Dimethyl Phthalate	AMB
	Phosphoric All	AMB	Ethyl Alcohol (Ethanol)	AMB
	Stearic	AMB	Ethylene Glycol	200F° (93C°)
			Gasohol	AMB
	ALKALIS		Gasoline	AMB
	Ammonium Carbonate Sat	150F° (66C°)	Hydraulic Fluid/Oil	150F° (66C°)
	Ammonium Hydroxide 29%	100F° (38C°)	Isopropyl Alcohol	AMB
	Calcium Hydroxide	100F° (38C°)	Jet Fuel	AMB
	Magnesium Carbonate Sat	100F° (38C°)	Kerosene	AMB
	Magnesium Hydroxide	100F° (38C°)	Methyl Alcohol (Methanol)	AMB
	Potassium Bicarbonate 50%	AMB	Naptha	AMB
	Potassium Carbonate 50%	AMB	Salt Water	200F° (93C°)
Potassium Hydroxide Sat	AMB	Sewage (Human Waste)	200F° (93C°)	
Sodium Bicarbonate Sat	100F° (38C°)	Skydrol	AMB	
Sodium Carbonate Sat	100F° (38C°)	Styrene	AMB	
Sodium Hydroxide 10%	100F° (38C°)	Toluene	AMB	
Sodium Hydroxide 50%	AMB	Turpentine	AMB	
BLEACHES		VM&P Naphtha	AMB	
Chlorine Water Sat	150F° (66C°)	Xylene	AMB	
Sodium Hypochlorite 15%	AMB			

AMB = Ambient

When restoring the surface of such items as a pump shaft, 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 will 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: 4 parts base to 1 part activator

Note: Carefully mix separate components before adding together.

Pot Life: 20-30 minutes at 75°F (24°C)

Minimum Thickness Per Coat: 40 mils (1mm)

Minimum Coats: One

Recoat: When gelled

Maximum Recoat Window Between Coats: If time exceeds six (6) hours, surface of coating must be abraded

Application Method:



Trowel/spatula or Glove

Drying Time: ASTM D1640 at 50-90% RH

Dry to Touch	90°F (32°C)	70°F (21°C)	50°F (10°C)	35°F (2°C)
	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 134 Mighty Metal 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.

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>>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.

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REVISION DATE: October 3rd, 2013