Rezorect[™]

PRODUCT DATA

154 Steel Putty

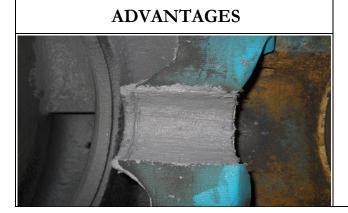
PRODUCT DATA SHEET

Typical Applications: Designed to repair and rebuild steel parts and equipment

Rezorect 154 Steel Putty is a trowel-applied, abrasion resistant putty, designed to repair and rebuild steel parts and equipment. Containing the maximum loading of specially sized and treated steel particles, Rezorect 154 protects against entrained particulate abrasion wearing surface abrasion

The combination of the steel particle reinforcement, with the corrosion resistant epoxy resin alloy, offers outstanding performance in the areas of abrasion, friction reduction and turn-around time. While 154 Steel Putty is designed to be cured at ambient temperature, when practical, it 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, 154 Steel Putty may be machined with standard tools.



- 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.
- When used for non-corrosion service, single coat applications are possible.
- Specially treated and sized steel reinforcements create a smooth and continuous surface.
- User friendly material is easy to mix and apply, reducing application time and returning equipment to service with shorter turnaround.
- Repairs to ferrous metals and aluminum.
- Advanced adhesion properties assure long lasting protection without fear of undercutting or delamination.

TECHNICAL DATA (Simplified)	Finish	Smooth	Service		
	Color	Gray	Temperature	200°F (93°C) Immersed	350°F (177°C) Dry
	Components	Two (2)	Limits		
	Curing Mechanism	Chemical Reaction	Compressive Strength	ASTM D695 12,500 psi (879 kg/cm²)	
	Sag Resistance	at 75°F (24°C) by ¼ in (6mm) ThicknessNo Sag	Flexural Strength	ASTM D790 8,100 psi (570 kg/cm ²)	
	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 1000 Cycles, 1000 Grm load CS/10 wheel, Taber abraser, 153 mg wgt loss	
	Volume Solids	100%	Adhesive Tensile Shear	Steel 2,600 psi	D1002 i (182 kg/cm²) oncrete Failure

APPLICATION DATA

	SURFACE PREPARATION					
CONCRETE	Whenever possible abrasive blast to ASTM 4258 Std. Remove all surface contaminates 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 D1002, with minimum pull achieved of 330 psi (21 kg/cm ²) before concrete failure.	Note : 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.	Note: 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 198 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 5 parts base and 1 part activator must be USED.	Note: 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 154 Steel Putty always wear protective clothing, gloves, face shield and eye protection. Consult Material Safety Data Sheet (MSDS) for additional hygiene and safety information.

	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°
Ξ	Hydrochloric 37%	AMB	Deionized Water	AMB
\underline{O}	Maleic	AMB	Dibutyl	AMB
Z	Oxalic	AMB	Dimethyl Phthalate	AMB
	Phosphoric All	AMB	Ethyl Alcohol (Ethanol)	AMB
H	Stearic	AMB	Ethylene Glycol	200F° (93C°
S			Gasohol	AMB
Ś	ALKALIS		Gasoline	AMB
CHEMICAL RESISTANCE	Ammonium Carbonate Sat	150F° (66C°)	Hydraulic Fluid/Oil	150F° (66C°
R	Ammonium Hydroxide 29%	100F° (38C°)	Isopropyl Alcohol	AMB
Ц	Calcium Hydroxide	100F° (38C°)	Jet Fuel	AMB
	Magnesium Carbonate Sat	100F° (38C°)	Kerosene	AMB
C)	Magnesium Hydroxide	100F° (38C°)	Methyl Alcohol (Methanol)	AMB
II	Potassium Bicarbonate 50%	AMB	Naptha	AMB
\mathbf{z}	Potassium Carbonate 50%	AMB	Salt Water	200F° (93C°
H	Potassium Hydroxide Sat	AMB	Sewage (Human Waste)	200F° (93C°
H	Sodium Bicarbonate Sat	100F° (38C°)	Skydrol	AMB
O	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 = Ambien

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

Application Method:



Trowel/spatula or Glove

Pot Life:	20-30 minutes at 75°F (24°C)		
Minimum Thickness Per Co	bat: 40 mils (1 mm)		
Minimum Coats:	Two or More		
Recoat:	When gelled		
Maximum Recoat Windo	w 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	3 0 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 154 Steel Putty is available in the following package sizes:

0.5 kg Kit packaged 6 Kits per / case 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. Glassflake International Inc. 6525 Greenland Road Jacksonville, FL 32258 (904) 268-4000 FAX (904) 268-3197 www.rezorect.com

REVISION DATE: October 3rd, 2013