

PRODUCT DATA

# **142 Quick Set Steel Putty**

### PRODUCT DATA SHEET

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

Rezorect 142 Quick Set Steel Putty is a trowel-applied, medium abrasion resistant putty, designed to make quick repairs to steel parts and equipment. It protects against entrained particulate abrasion and wearing surface abrasion and is formulated with the maximum loading of specially sized and treated steel particles.

The combination of the steel particle reinforcement with the corrosion resistant epoxy resin alloy offers maximum performance in the areas of abrasion, friction reduction and turn-around time. As the name suggests, Rezorect 142 Quick Set Steel Putty is specifically designed to cure, dry to touch in 10 minutes placing coated objects back into 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 standard 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.
- 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.
- Long lasting protection to ferrous metals.
- Putty sets within 10 minutes, hard within 1 hour.
- Advanced adhesion properties assure long lasting protection without fear of undercutting or delamination

	Finish	Smooth	Service 2000 000 27000	350°F (177°C) Dry	
TECHNICAL DATA (Simplified)	Color	Gray	Temperature 200°F (93°C) 350°F		
	Components	Two (2)	Limits		
	Curing Mechanism	Chemical Reaction	Compressive Strength  ASTM D695 12,000psi (844 kg/cn	ASTM D695 12,000psi (844 kg/cm²)	
	Sag Resistance	at 75°F (24°C) by ¼ in (6mm) 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/cm	ASTM D638 3,700 psi (260 kg/cm²)	
	VOC	None		ASTM D4060 1000 Cycles, 1000 Grm load CS/10 wheel, Taber abraser,	
	Volume Solids	100%	ASTM D1002 Adhesive Tensile Shear Steel 2,600 psi (182 kg/c Concrete - Concrete Fa:		

#### 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/cm²) before concrete failure.	<b>Note</b> : 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.	<b>Note:</b> 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 142 Quick Set Steel Putty 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.							
	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°)			
Ħ	Hydrochloric 37%	AMB	Deionized Water	AMB			
$\mathbf{C}$	Maleic	AMB	Dibutyl	AMB			
Z	Oxalic	AMB	Dimethyl Phthalate	AMB			
<u> </u>	Phosphoric All	AMB	Ethyl Alcohol (Ethanol)	AMB			
Ţ	Stearic	AMB	Ethylene Glycol	200F° (93C°)			
$\mathbf{S}$			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			
T	Calcium Hydroxide	100F° (38C°)	Jet Fuel	AMB			
<b>₩</b>	Magnesium Carbonate Sat	100F° (38C°)	Kerosene	AMB			
$\sim$	Magnesium Hydroxide	100F° (38C°)	Methyl Alcohol (Methanol)	AMB			
11	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			
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 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

Pot Life: 5 minutes at 75°F (24°C)
Minimum Thickness Per Coat: 40 mils (1 mm)
Minimum Coats: One
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	5 mins	10 mins	20 mins	40 mins

**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 142 Quick Set 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.

# Rezorect

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