

# **TECHNICAL DATA**

# 9200 SYSTEM POTABLE WATER COATING

## **DESCRIPTION AND USES**

Rust-Oleum<sup>®</sup> 9200 System is a low VOC, low HAPS, two component phenalkamine epoxy that is designed for water immersion service and is certified for use in potable water storage tanks with 3,000 gallons capacity or larger.

The 9200 System is suitable for application as low as  $20^{\circ}$ F, however to meet NSF certification for potable water service, the coating must cure for 7 days at a minimum of 75°F.

The 9200 System is also suitable for use in many other maintenance coating applications whenever low temperature curing is needed.

This product is labeled 9200 System Low Temperature Epoxy.

### **FEATURES**

- Certified for use in potable water storage tanks with 3,000 gallon minimum capacity in accordance with ANSI/NSF Std. 61.
- Self priming DTM high build epoxy
- Excellent corrosion protection
- Excellent surface wetting
- Good early moisture resistance
- Fast dry
- Low VOC and low HAPs content

### PRODUCTS

1-Gallon	5-Gallon	Description
	316834	9200 System Gray
	316835	9200 System White
	318207	9200 System Blue
316836		9200 Activator

### **PRODUCT APPLICATION**

### SURFACE PREPARATION

ALL SURFACES: Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Krud Kutter<sup>®</sup> Cleaner Degreaser, commercial detergent or other suitable cleaner. Mold and mildew areas must be cleaned with a chlorinated cleaner or bleach solution. Rinse thoroughly with fresh water and allow to dry if possible. Best results are obtained if the surface is completely dry.

STEEL (IMMERSION): Abrasive blast clean to a minimum SSPC-SP-10 Near-White Grade (NACE 2) and achieve a surface profile of 1.5-3.0 mils. All weld spatter must be removed and rough welds should be ground smooth. Sharp edges should be ground to a smooth radius.

CONCRETE (IMMERSION): Hand or power tool clean to remove all loose or unsound concrete, masonry, or previous coating. Very dense, non-porous concrete should be acid etched or abrasive blasted to remove the laitance layer and create a surface profile of 1.5–3.0 mils. Allow new concrete to cure for 30 days before coating.

### **PRODUCT APPLICATION (cont.)**

### MIXING

Power mix base component before adding activator, then combine at a 4:1 base to activator ratio by volume and power mix together. If the 316836 Activator is near the end of shelf life, it may require additional scraping of the sides of the container during mixing to ensure all material is completely remixed.

### APPLICATION

Apply only when the air temperature is between  $20-100^{\circ}F$  (-7-38°C) and the surface temperature does not exceed  $120^{\circ}F$ (49°C). The relative humidity should not be greater than 85%. Be aware of possible ice formation on the substrate if the surface or air temperatures are below  $32^{\circ}F$  (0°C).

A minimum of two coats, each within the recommended dry film thickness range, is required for water immersion service. Alternating colors are suggested.

Best results are achieved by airless or air atomized spray. Application by brush and roller is acceptable; however multiple coats may be needed to obtain the desired appearance, recommended dry film thickness, and adequate hiding. Avoid excessive re-brushing or re-rolling, and tie-in within 10 minutes at 75°F (24°C).

Brush and roller is the preferred method of application on damp substrates.

#### Pools

The 9200 System can be used as a pool coating over existing epoxy pool coatings, new bare concrete, plaster, Gunite, and fiberglass. The pool must be completely empty and dry before coating. After pool is emptied, this typically requires 7-10 days depending on temperature and humidity. To test the dryness of concrete, Gunite or plaster pool surfaces, securely tape a 2 ft. by 2 ft. piece of clear plastic onto a horizontal and vertical surface at the deep end of the pool. Check after 24 hours. If water condensation is visible under the plastic, this is an indication that the surface is not completely dry, and NOT suitable for coating.

Allow additional dry time and retest. Follow surface preparation, mixing and application instructions. Avoid painting in midday sun. Application is recommended early in the day or late in the afternoon when at least 2 hours of sunlight remain after completion of the job.

Allow minimum of 5-7 sunny days cure before filling pool. Early contact with water can cause premature fading, chalking and blistering. Over chlorinated water can cause a bleached-out appearance. Sunlight and UV will cause chalking and fading. **Do not** use over: 1) chlorinated rubber, 2) synthetic rubber, 3) vinyl, 4) acrylic. See Note in Performance Characteristics Section.

**NOTE:** In swimming pool service, early chalking may occur if the water pH is outside the range of 7.2-7.6 and/or if the water temperature exceeds 100°F (38°C).



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### **PRODUCT APPLICATION (cont.)**

#### EQUIPMENT RECOMMENDATIONS

BRUSH: Use a good quality natural or solvent compatible synthetic bristle brush. Avoid excessive brushing.

ROLLER: Use a good quality short nap synthetic roller cover with a phenolic core.

AIR-ATOMIZED SPRAY: (pressure pot): Use a pressure pot system equipped with dual regulators, and a <sup>3</sup>/<sub>6</sub> inch ID minimum fluid hose. The gun should use a 0.070 inch fluid tip with the appropriate air cap.

### AIRLESS SPRAY:

Pump Ratio	Pump Output	Fluid Hose
30:1	2.5 GPM	³∕₃" ID
Fluid Pressure	Fluid Tip	Filter Mesh
2,000-2,500 psi	0.017-0.021	60

Teflon packages are recommended and are available from the pump manufacturer.

### DRY AND RECOAT TIMES

Dry times based on  $75^{\circ}$ F and 50% relative humidity. For potable water immersion service, the coating must cure for 7 days at  $75^{\circ}$ F (24°C).

The maximum recoat time for immersion service is 30 days.

The curing schedule listed below may be used as a reference guide for non-immersion service.

#### CURING SCHEDULE (FOR NON-IMMERSION SERVICE)

Surface Temperature	Dry to Touch	Dry to Handle	Dry to Recoat
20°F (-7°C)	4 hours	36 hours	24 hours
35°F (2°C)	2 hours	18 hours	2 hours
50°F (10°C)	1 hour	11 hours	1 hour
75°F (24°C) 30 minutes		3 hours	45 minutes
90°F (32°C)	15 minutes	2 hours	30 minutes

### **PRODUCT APPLICATION (cont.)**

### THINNING

Thin only with Methyl Ethyl Ketone (MEK) and do not exceed 10% by volume per gallon in order to comply with Standard 61 Certification.

For Low VOC non-immersion application thin only with Rust-Oleum Low VOC Thinner 315512 and do not exceed 10% by volume per gallon.

#### **CLEAN-UP**

190 Thinner or MEK. In case of spillage, absorb and dispose of in accordance with local applicable regulations.



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### PHYSICAL PROPERTIES

Resin Type		Phenalkamine Epoxy	
Pigment Type		Titanium Dioxide, Microcrystalline Silica	
Solvents		Xylene and other Aromatic Hydrocarbons	
Weight*	Per Gallon	14.0 lbs.	
	Per Liter	1.7 kg	
Solids*	By Weight	80-84%	
	By Volume	63-67%	
Volatile Organic Compounds*		<250 g/l (2.1 lbs./gal.)	
Recommended Dry Film Thickness (DFT) Per Coat		4.0-6.0 mils (100-150μ)	
Wet Film to Achieve DFT		6-9.5 mils (150-238μ)	
Theoretical Coverage at 1 mil DFT (25μ)		1,010-1,075 sq.ft./gal. (24.8-26.4 m²/l)	
Practical Coverage at Recommended DFT (assumes 15% material loss)		140-225 sq.ft./gal. (3.4-5.5 m²/l)	
Mixing Ratio		4:1 base to activator by volume (316836 Activator)	
Induction Period		None required	
Pot Life		3 hours @ 70º F (21ºC) and 50% RH	
		2 hours @ 90º F (32ºC) and 50% RH	
	Touch	30 minutes	
Dry Times of 75°F	Handle	3 hours	
Dry Times at 75°F (24°C) and 50% Relative Humidity	Recoat	45 minutes - 180 days (max. 30 days for immersion service)	
Relative numberly	Immersion	7 days at 75°F (24°C) is required for potable water immersion service	
Dry Heat Resistance		Continuous 180°F (82°C) intermittent 220°F (104°C); color shift at temperatures greater than 200°F (93°C), but it will not affect film integrity	
Shelf Life		2 years	
Safety Information		For additional information, see SDS	

\*Activated material.

Calculated values are shown and may vary slightly from the actual manufactured material.

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