# Rhino Ceramic Epoxy

## Water Quality Epoxy

## PRODUCT DESCRIPTION

**RHINO CERAMIC EPOXY** is an 80% solid two-component ceramic epoxy. It provides an extremely hard, high gloss, seamless, hygienic and durable surface. The coating is engineered to bond to most any surface, resist wear and tear from impact and abrasion. Cured **RHINO CERAMIC EPOXY** is highly resistant to a broad range of chemicals including caustics, acids, salts, fuels, and solvents. **RHINO CERAMIC EPOXY** is self leveling and easy to apply. Available colors are blue and tan. It can be applied to both horizontal and vertical surfaces. **RHINO CERAMIC EPOXY** is ideal for water tanks, water pipes and potable water containers.

## PRODUCT USES

**WATER QUALITY: RHINO CERAMIC EPOXY** is formulated as an outstanding barrier coating for the protection of steel and concrete immersed in potable water or aggressive chemical environments. This epoxy has been certified for cold end use the by Water Quality Association to meet the requirements of NSF/ANSI International Standard 61 for potable water immersion service in tanks 10,000 gallons and greater capacity.

**GENERAL: RHINO CERAMIC EPOXY** is suitable for use on most any horizontal or vertical surface in the toughest conditions. In can be used in restrooms, shower stalls, meat packing plants, car washes, dairies, restaurants, hospitals, water tanks, and everywhere else a tough, highly cleanable, chemical and solvent resistant coating is needed. **RHINO CERAMIC EPOXY** should only be applied where it will not be exposed to direct sunlight.

## SURFACE PREPARATION

Steel and concrete must blasted to achieve scarifying of the surface.

**STEEL** (Immersion): SSPC-SP 10 Near White Metal Blast achieved with a non-steel granular aggregate and a minimum 1.5 mil surface profile. No re-scarifying is required when recoating with itself if recoated within 30-days. (Non-Immersion) – SSPC-SP 6 Commercial blast.

**CONCRETE**: SSPC-SP 7 Brush Off Blast. New Concrete must cure at least 28 days and contain less than 14% moisture prior to painting.

For existing surfaces, follow best surface preparation including removing all dirt, oil, and grease with appropriate cleanser and rinse thoroughly. Remove all mildew, algae and mold off of surface with a chlorine solution (2 quarts pool chlorine to 4 ½ gallons water) and rinse thoroughly. Remove all loose paint and powdery substances by scraping and pressure washing. Rust must be removed. Glazed ceramic tile must be thoroughly chemically etched or sanded.

## APPLICATION PROCEDURE

Stir the activator and epoxy component separately prior to mixing. Thoroughly mix one part activator to four parts **RHINO CERAMIC EPOXY** by volume. Power agitate until components are thoroughly mixed. Mix slowly so air is not combined into the mixture. The pot life is 2 hours at 80 degrees Fahrenheit and decreases with higher temperatures. No thinning is required. Dry time will depend upon temperature, humidity, and location. Spread rate may vary depending on the profile and porosity of the surface. Let surface dry for 12 hours for recoat and one week for potable water immersion.

**METHODS**: AIRLESS SPRAYER- Use .029 tip, 30 mesh filter, psi of 80-100. Remove all filters from the pump. ROLL- use lamb's wool cover. BRUSH- use natural bristle brush.

**COVERAGE**: A minimum of 15 total dry mils must be achieved. Wet film thickness of 21 mils is required via one or more coats. Water Tanks: The mil thickness should be divided into two separate coats. Each coat at wet mil thickness of 10-14 mils (150 sq/ft

# Rhino Ceramic Epoxy

## Water Quality Epoxy

per gallon or heavier) are necessary for optimal water sealing. Each coat should be applied in cross hatch pattern.

**LIMITATIONS**: Not for immersion service above 120˚ F (49˚ Celsius) or dry heat above 200˚ F (93˚ C). Not recommended for sewage service. Not recommended for immersion in concentrated solutions of mineral acids or organic acids.

**COVERAGE**:

Theoretical- 1,476 sq/ft per gallon at 1.0 mil dry film thickness

Theoretical – 147 sq/ft per gallon at 10 mil dry film thickness.

Theoretical - 73.5 sq/ft per gallon at 20 mil dry film thickness.

**DRY FILM THICKNESS**: 7.0-15.0 mils per coat. Multiple coats may be necessary

**WET FILM THICKNESS**: 10-21 mils

**POT LIFE**: Two hours at 80 degrees decreasing with higher temperatures

**MIX RATIO**: Blend one part activator to four parts **RHINO CERAMIC EPOXY** by volume. Power agitate until components are thoroughly mixed.

**CLIMATE**: Use this coating only if the substrate and ambient air temperatures are above 40˚ F and is expected not to decrease below 40 degrees for at least two hours after application. Also, the surface temperature must be 5˚ F above the dew point for a period of at least two hours after application to avoid condensation occureing on wet epoxy.

**THINNING**: None required

**DRY TIMES**:

To handle – 12 hours at 80˚ F

To recoat – 50˚ F or higher, 12 hours

Potable Immersion Service – Seven days with proper ventilation and 50 degrees or higher. 14 days with poor ventilation and 40˚ F – 50˚ F.

**NOTE**: High film thickness, low temperature and/or poor ventilation will retard dry times.

## CLEAN UP

Clean up all spills, tools and overspray immediately while the coating is still wet with xylene.

## PHYSICAL DATA

- Volume Solids: 70% +/- 2%
- Solids by Weight: 80% =/- 2%
- Volatile Organic Contents: 251 grams/Liter mixed
- Color: Blue and Tan
- Performance: Two coats at 20 mils dry

## TECHNICAL DATA

| | | | |
|---|---|---|---|
| DISTILLED WATER | Immersion 77 F (25 C) | One year | No blisters or undercutting |
| IMPACT RESISTANCE | ASTM D 2794 | 1 week | 120 in/lbs., No cracking |
| PULL OF ADHESION | ASTM D 4541 | 1 week | 900 PSI, avg of 4 pulls, 0.195 avg loss/1,000 cycles |
| FREEZE/THAW | ASTM D 3059 method A | | Passed @10 cycles |

**All data times are bases on ambient temperatures of 77 degrees Farenheit and relative humidity of 50%*