

Part # - RC406

**DESCRIPTION:**

Rhino™ 406 is a 2:1 epoxy, spray in place pipe lining for use exclusively with plural component spray equipment. It is a highly versatile formulation designed for use in a wide variety of applications ranging from potable water relining, to highly demanding chemical environment coatings such as gas and oil processing. Rhino™ 406 has excellent adhesion to damp substrates such as manholes, steel, clay, and cementitious pipe or similar conveyances requiring coating and rehabilitation.

Rhino™ 406 has excellent heat resistance properties allowing its use in elevated temperature environments. Applications are tack free within 2 – 3 hours and may be immediately recoated to achieve additional coats of up to 50 mils to repair cracks or fill defects. Pipes lined with the Rhino™ 406 are returned to service within 24 hours, and will cure underwater providing an exceptionally fast pipe placement and service turnaround. Rhino™ 406 meets NSF 61 standards and fulfills other demanding and time critical application requirements.

**FEATURES & BENEFITS:**

- Rapid installation of semi structural high build pipe linings and coatings
- 24 hour return to service for potable water pipe lining to NSF standard 61
- Extremely tolerant of damp or humid environments, cures underwater
- Monolithic repair membrane that bridges small cracks and other defects
- Chemical resistant for gas, oil and other industrial processing applications
- Heat resistant to 175°F (80°C); suited to hot water pipes/elevated temperature environments
- Excellent adhesion to damp, cool substrate
- Available in blue, green or gray

**APPLICATION PROPERTIES:**

Coverage Rate at 20 mils (500 microns):	80 sq ft/gallon (2 sq meters/liter)
% Solids by Weight:	100%
Specific Gravity:	1.45 – 1.5
Mix Ratio, Parts per Volume	2 parts Resin (A) : 1 part Hardener (B)
Mixed Viscosity:	Highly thixotropic sprayable paste
Working Time:	10 – 15 minutes
Tack Free Time:	2 – 3 hours
Return to Service:	24 hours
Speed of Application:	>600 meters/shift (depending on pipe diameter)

**CURED PHYSICAL PROPERTIES:**

Compressive Strength (psi):	12,000 – 14,000	ASTM D695
Flexural Strength (psi):	13,000 – 13,800	ASTM D790
Tensile Strength (psi):	7,000 – 8,000	ASTM D638
Tensile Elongation (%):	4.5%	ASTM D638
HDT:	175°F (80°C)	ASTM D648-264

## CHEMICAL RESISTANCE OF RHINO™ 406:

	% WEIGHT GAIN (LOSS)
Xylene	0.0
Toluene	2.3
1,1,1 Trichloroethane	0.0
MEK	2.3
10% Sulfuric Acid	0.0
70% Sulfuric Acid	0.2
10% Hydrochloric Acid	0.1
50% Sodium Hydroxide	(0.2)
Skydrol	(0.3)
Mogas, Diesel	0.0
JP-4, JP-5, JP-7, JP-8	0.0

## SURFACE PREPARATION:

Surfaces must be structurally sound and free from contaminants such as dust, oil or dirt. Sand or sweep blasting, or other means of mechanical abrasion achieves the best bond. All freestanding water must be removed until the epoxy is placed and tack free. General surface preparation and application procedures specified in ACI 503.1-4 should be followed.

## CONDITIONS TO AVOID:

Do not apply to concrete less than 28 days old.

Do not apply to when surface temperature(s) are below 50°F (10°C).

## TIPS FOR USE:

Temperature and humidity conditions affect the cure and tack free times of this material. Warm, dry conditions speed the cure and cool, damp conditions will lengthen the cure time. Each component should be stirred prior to mixing.

## HOW SUPPLIED:

Rhino™ 406 is supplied in 11 liter (3 gallon) kits, 55 liter (15 gallon) kits, and 605 liter (165 gal) kits.

## SAFETY PRECAUTIONS:

### Health Considerations: Consult the Rhino Linings® Safety Data Sheets (SDS)

This chemical system requires the use of proper safety equipment and procedures. Please follow the Rhino Linings® product SDS and Safety Manual for detailed information and handling guidelines.

### For Your Protection:

The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. Because of numerous factors affecting results, **Rhino Linings Corporation makes no warranty of any kind, express or implied**, other than that the material conforms to its applicable current Standard Specifications. Rhino Linings Corporation hereby disclaims any and all other warranties, including but not limited to those of merchantability or fitness for a particular purpose. No statements made herein may be construed as a representation or warranty. The liability of Rhino Linings Corporation for any claims arising from or sounding in breach of warranty, negligence, strict liability, or otherwise shall be limited to the purchase price of the material.

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