

# Rhino 406 Plural Component Epoxy

# **Data Sheet**



Part #: 406A 406B

### **DESCRIPTION:**

Rhino 406 Plural Component Epoxy is a 2:1 epoxy, 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 Plural Component Epoxy has excellent adhesion to damp substrates such as manholes, steel, clay, and cementitious pipe or similar conveyances requiring coating and rehabilitation.

Rhino 406 Plural Component Epoxy 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. Tanks and pipes lined with Rhino 406 Plural Component Epoxy can be returned to service within 24 hours. Rhino 406 Plural Component Epoxy certified to NSF/ANSI 61 section 5 potable water standard when installed per its respective scope and guidelines<sup>1</sup>.

# **TYPICAL USES:**

Formulated for use on surfaces where corrosion and water resistance is needed, including:

- Potable Water Structures
- Tanks, Reservoirs, and Basins
- Water Mains, Distribution, and Transmission Lines
- Secondary Containment
- General Maintenance
- Bonding Elastomers

### **FEATURES AND BENEFITS:**

- Rapid Installation of Semi Structural High Build Tank and Pipe Linings and Coatings
- 24 Hour Return to Service for Potable Water Tank & Pipe Lining to NSF/ANSI 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

#### **APPLICATION PROPERTIES:**

Coverage Rate at 20 mils (500 Microns):	80 sq ft/Gallon (2 sq Meters/Liter)%
% Solids by Weight:	Solids 100%
Specific Gravity:	1.45 – 1.5
Mix Ratio, Parts Per Volume	2 Parts Resin (A) : 1 Part Hardener
Mixed Viscosity:	Highly Thixotropic Sprayable Paste
Working Time:	10 – 15 Minutes
Tack Free Time:	2 – 3 Hours
Return to Service:	24 Hours:
Full Cure:	72 Hours:

<sup>&</sup>lt;sup>1</sup> See product certification.

# **RHINO 406 PLURAL COMPONENT EPOXY**

#### **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:	% 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)	

# **SURFACE PREPARATION:**

JP-4, JP-5, JP-7, JP-8

Surfaces must be structurally sound and free from contaminants such as dust, oil, or dirt. Abrasive 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.

(0.3) 0.0

0.0

#### **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:**

Skydrol

Mogas, Diesel

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. When using as a bonding primer on elastomers, thoroughly abrade and solvent wipe the existing elastomer. Apply 5-7mils of 406 Epoxy. New spray applied elastomer can be applied after 1 hour and within 24hrs of the application of the 406 Epoxy.

#### **HOW SUPPLIED:**

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

### **RHINO 406 PLURAL COMPONENT EPOXY**

### **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 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 end users and processors.

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