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# **Coal Tar Epoxy**

#### **PRODUCT DESCRIPTION**

Coal-Tar N is a bituminous, two-component polyamide-epoxy. It can be applied in one-coat application of 18 mils with no loss of adhesion. It displays excellent weathering and resistance to salt and fresh water degradation for steel and concrete.

Coal-Tar N is recommended for use on a large variety of steel or concrete structures. Coal-Tar-N meets the performance requirements of SSPC Paint no. 16, MPI # 35, and SSPC Paint No. 33 (replaced SSPC Paint No. 12).

Immersion Marine Equipment Salt & Fresh Water

Linings In: Alkalies Bilge Tanks Fresh Water On Shore Pipelines Intermittent Immersion: Dams and Locks Offshore Structures

Non-Immersion Chemical Plants **Cogeneration Plants** Power Plants Refineries Structural Steel Underground Storage Tanks

Salt Solutions Salt Water Sour Crude Tankage

Sewage Treatment

PERFORMANCE PROPERTIES

Pilings

#### **System Tested:**

Substrate: Steel Surface Preparation: SSPC-SP6 1 ct. Coal Tar-N Black@ 18 mils dft

Adhesion:

Method: ASTM D4541 Result: Passes 600 lbs/sq in

**Pencil Hardness:** Method: ASTM D3363 Result: 4H

#### Flexibility:

Method: ASTM D522 Result: Passes 180° bend 1" Mandrel

(continued on page two)

#### **TECHNICAL INFORMATION**

**Generic Types:** Polyamide Cured - Coal Tar Epoxy. Two-component product. **Gloss:** Semi-Gloss Use: Protective / Decorative Black Color: **Recommended Film Thickness:** 16.0 - 18.0 mils dry 21.0 - 24.0 mils wet Apply in two coats (a, 8-9) mils dry. 10.8 – 12.1 mils wet. **Spread Rate:** 66 - 75 sq ft/gal (a) the recommended dft Dry Time: @ 77°F (25°C) & 50% Relative Humidity To Touch: 3 - 4 hours Tack Free: 16 - 20 hours If product is to be recoated, you Recoat: must recoat within 26 hours for good adhesion. After this time, surface should be abraded. 20°F (-7°C) Minimum **Storage Temperature:** 110°F (43°C) Maximum Flash Point: 80°F (20°C) Brookfield Viscosity: 20 – 40 Poise with #7 Spindle @ 100 rpm **VOC:** 1.88 (204 g/l)  $\pm$  1% (activated) #HAPS / Gal Solids: 2.51 (activated) **Solids By Volume:** 74.01  $\pm$  2% (activated) Solids By Weight:  $78.89 \pm 2\%$  (activated) Weight Per Gallon:  $8.92 \pm .15$  lbs/gal (activated) Pot Life: Four hours @ 77°F (25°C) Shelf Life: One year unopened from date of manufacture, each component. Recommended Primer: Product is self-priming, but can be used over Enviro-Zinc Epoxy Primer for maximum protection of steel. Self-priming over concrete. Clean Up: 560X3504 (Xylene)

### **PERFORMANCE PROPERTIES** (continued from page one)

Dry Heat Resistance:

Method: ASTM D2485 Result: Passes 250°F

Salt Spray Resistance: Method: ASTM B117 Result: Passes 1000 hours – no rust, no blistering

Abrasion Resistance: Method: ASTM D4060 1 kg load Result: 1000 cycles, 60 mg los

## **APPLICATION INFORMATION**

#### SURFACE PREPARATION:

Surface of substrate should be dry, clean, and in sound, paint-worthy condition. The surface must be free of dirt, grease, oil, salts, loose rust, loose mill scale, and any other foreign materials or contaminants. For non-severe exposure, SSPC-SP3, Power Tool Cleaning may be all that is required. SSPC-SP6, Commercial Blast Cleaning is required for more demanding conditions or severe chemical exposure.

#### Steel and Iron:

The minimum surface preparation for steel and iron is SSPC-SP2/SP3, Hand Tool or Power Tool Cleaning. Prior to this procedure, the surface should be solvent cleaned per SSPC-SP1. For more severe exposures, begin with SSPC-SP1, followed by SSPC-SP6, Commercial Blast Cleaning. Bare metal should be primed as soon after surface preparation as possible, or before flash rusting occurs.

## **APPLICATION CONDITIONS:**

Surface Temperature:

 $50^{\circ}$ F ( $10^{\circ}$ C) Minimum  $110^{\circ}$ F ( $43^{\circ}$ C) Maximum Surface should be dry and a minimum of  $5^{\circ}$ F ( $3^{\circ}$ C) above the dew point.

#### **Paint Temperature:**

50°F (10°C) Minimum

90°F (32°C) Maximum

#### **Relative Humidity:**

Dry times may be adversely affected as the relative humidity increases. Caution should be taken when painting in very humid conditions.

## **MIXING & THINNING INSTRUCTIONS:**

Mix one part base component with one part activator component using mechanical agitation. Stir well and allow catalyzed mixture to blend 15-30 minutes before use.

**Note:** The addition of thinner reduces viscosity, which, in turn, affects spread rate and application characteristics. If thinner is used, make sure it is well incorporated into the paint prior to application.

This product is available in 10-gallon kits. Each kit consists of the following: five gallons base component and five gallons activator component.

# **APPLICATION EQUIPMENT:**

The following are general recommendations. Pressure and tip size may be varied due to temperature changes and for proper spray characteristics.

**Thinning:** Thin up to 5% by volume with 560X3504 (Xylene)

See Mixing and Thinning Instructions for further information.

Airless Spray: Pump Ratio: 30:1 Hose: 1/4" or 3/8" Tip Size: .015 – .019 Pressure: 2400 – 2600 psi Filter: 60 Mesh

Air-assisted Airless Pump Ratio: 30:1 Fluid Pressure: 800 – 1200 psi Air Pressure: 10 – 20 psi Fluid Hose: 5/16" – 1/2" Tip Size: .017 – .019

Conventional Spray:

Gun: Graco AirPro or equal Fluid Nozzle: 1.4 mm Air Cap: 289773 Atomization Pressure: 40 – 50 psi Fluid Pressure: 15 – 20 psi

## **HINTS FOR BETTER PERFORMANCE:**

A clean substrate is necessary for optimal performance, as direct contact of coating and steel surface is required for rust inhibition and good adhesion.

All welds, sharp edges, angles, and other areas prone to early rusting due to insufficient coverage should be stripe-coated prior to full application in order to help prevent premature failure in these areas.

Over-thinning of the coating material can result in an insufficient film-build, poor adhesion and overall poor appearance.

During the spray application, use a 50% overlap with each pass of the gun. This will help ensure complete and thorough coverage, avoiding low build areas, which may corrode prematurely due to insufficient primer.

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The technical data furnished are true and accurate to the best of our knowledge at the date of issuance. It is subject to change without prior notice. Test results are believed to be reliable, however, no guarantee of accuracy is given or implied. Liability, if any, is limited to replacement of product. No other warranty or guarantee of any kind, expressed or implied, is made, including fitness for a particular purpose.