

**RUST-OLEUM®**

## C9578 SYSTEM COAL TAR EPOXY

### DESCRIPTION AND USES

A two-component, high solids polyamide converted epoxy blended with a refined coal tar pitch. Meets Corps of Engineers Specs C-200, C-200A, Steel Tank Institute Corrosion Control System STI-P3, AWWA Spec C210-84, and SSPC-Paint 16.

Designed for use on steel or concrete surfaces in severe industrial or marine environments. Provides outstanding resistance to abrasion, strong chemicals and immersion in fresh or salt water. Not for use in potable water tanks; may impart an odor to liquids. Ideal for use on a variety of surfaces exposed to extremely corrosive environments. Not recommended for exposure to strong acids or immersion in strong solvents.

#### FEATURES:

- High-build, 16-24 mils (400-610 $\mu$ ) in a single coat (up to 35 mils with force curing)
- Compatible with controlled cathodic protection
- Suitable for used in exposures as referenced in the following specifications\*
  - \* Corp of Engineers C-200, C200a
  - \* AWWA C-210 for exterior
  - \* SSPC-Paint 16
  - \* Steel Tank Institute Corrosion Control System STI-P

### PRODUCTS

#### 1.25 Gallons Description

C9578402	Coal Tar Base Component (1-Gallon)
C9502504	Coal Tar Epoxy Activator (1-Quart)

#### 5-Gallons Description

C9578380	Coal Tar Epoxy Base Component (Partial pail)
C9502402	Coal Tar Epoxy Activator (1-Gallon)

### COMPANION PRODUCT

#### RECOMMENDED PRIMERS

C9578 is a self-priming product.

#### COMPATIBLE PRIMERS

HS9369 or HS9381 Epoxy primers.

### PRODUCT APPLICATION

#### SURFACE PREPARATION

**ALL SURFACES:** Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Pure Strength® Cleaner/Degreaser item #3599402, 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 fully dry. All surfaces must be dry at time of application.

**STEEL:** For immersion service, abrasive blasting to a minimum Near White Grade (SSPC-SP-10, NACE 2) with a 2-3 mil (50-75 $\mu$ ) surface profile is recommended for optimal performance. All weld spatter must be removed along weld seams, rough welds should be ground smooth, and all sharp edges should be ground to a smooth radius.

Commercial Grade (SSPC-SP-6, NACE 3) with a 2-3 mil (50-75 $\mu$ ) surface profile is recommended for optimal performance. Abrasive blast cleaned steel requires two coats.

**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 mils. Allow new concrete to cure for 30 days before coating.



**PRODUCT APPLICATION (cont.)**

**APPLICATION**

Apply only when air and surface temperatures are between 50-100°F (10-38°C) and surface is at least 5°F above dew point. For immersion service and severe environments, a total dry film thickness of 16-20 mils is required. It is strongly recommended this be achieved as a two-coat application of 8-10 mils per coat. Conventional or airless spray preferred.

**EQUIPMENT RECOMMENDATIONS**

**BRUSH/ROLLER:** For small touch-up or striping of weld seams.

**CONVENTIONAL SPRAY:** Pressure pot with dual regulator, minimum 3/8 inch I.D. fluid hose not greater than 50 feet in length. Use a 0.086 inch I.D. fluid tip with the appropriate air cap. Thin as needed up to 16% with 160 Thinner for all air atomized spray applications.

**AIRLESS SPRAY:**

Pump Ratio	Pump Output	Fluid Hose
30:1	3.0 GPM	1/2 inch I.D.
Fluid Pressure	Fluid Tip	Filter Mesh
2,100-2,500	0.023-0.035	30

**THINNING**

Normally not necessary. If desired, thin as needed up to 16% with 160 Thinner.

**MIXING**

Power mix base component before adding activator, then combine at a 4:1 ratio by volume and power mix together. Thoroughly mix for at least two minutes. Note: both components will thicken in viscosity when cold. The material should be warmed to room temperature before mixing for best results.

**CLEAN UP**

160 Thinner or MEK

**PERFORMANCE CHARACTERISTICS**

**TABER ABRASION**

**METHOD:** ASTM D4060, CS-17 wheels, 1,000 gram load, 1,000 cycles

**TEST SAMPLE:** Blast cleaned steel, 2 coats of material

**RESULT:** 130 mg loss

**PULL OFF ADHESION**

**METHOD:** ASTM D4541

**TEST SAMPLE:** Blast cleaned steel, 2 coats of material

**RESULT:** >1,400 psi (pneumatic)

**IMPACT RESISTANCE (direct)**

**METHOD:** ASTM D2794, Gardner Impactor (1/2 inch diameter)

**TEST SAMPLE:** Blast cleaned steel, 2 coats of material

**RESULT:** 100 in.-lbs.

**SALT FOG EXPOSURE**

**METHOD:** ASTM B117, 2,000 hour exposure

**TEST SAMPLE:** Blast cleaned steel, 2 coats of material

**RESULT:** No blistering, rusting or delamination. No measurable undercutting at scribe.

For chemical and corrosion resistance, see the Rust-Oleum Industrial Brands Catalog (Form #206275).



## TECHNICAL DATA

# C9578 SYSTEM COAL TAR EPOXY

### PHYSICAL PROPERTIES

		COAL TAR EPOXY
<b>Resin Type</b>		Polyamide converted epoxy blended with refined coal tar
<b>Solvents</b>		Xylene, methanol
<b>Weight*</b>	<b>Per Gallon</b>	10.2-11.0 lbs.
	<b>Per Liter</b>	1.2-1.3 kg.
<b>Solids*</b>	<b>By Weight</b>	75-79%
	<b>By Volume</b>	75-77%
<b>Volatile Organic Compounds*</b>		<250 g/l (2.1 lbs./gal.), as supplied
<b>Recommended Dry Film Thickness (DFT) Per Coat</b>		8-10 mils (200-250µ), minimum
<b>Wet Film to Achieve DFT</b>		10.5-13.5 mils (262.5-337.5µ)
<b>Theoretical Coverage at 1 mil DFT (25µ)</b>		1,203-1,235 sq. ft./gal. (29.6-30.4 m <sup>2</sup> /l)
<b>Practical Coverage at Recommended DFT (assumes 15% material loss)</b>		100-130 sq. ft./gal. (2.5-3.2 m <sup>2</sup> /l)
<b>Mixing Ratio</b>		4:1 base to activator by volume
<b>Induction Period</b>		None
<b>Pot Life</b>		2 hours @ 80°F; 1 hour @ 100°F
<b>Dry Times at 70-80°F (21-27°C) and 50% rel. hum.</b>	<b>Tack-free</b>	3-4 hours
	<b>Handle</b>	18-36 hours
	<b>Recoat</b>	16-25 hours (If recoat time exceeds 48 hours, brush blast surface of previous coating to create a surface profile)
<b>Force Cure</b>		2 hours at 225°F (107°C)
<b>Dry Heat Resistance</b>		140°F (60°C)
<b>Maximum Immersion Temperature</b>		120°F (49°C)
<b>Shelf Life</b>		12 months, both components (do not store in temperature above 135°F)
<b>Safety Information</b>	<b>Contains</b>	No lead has been deliberately added
	<b>Warning!</b>	<b>FLAMMABLE LIQUID AND VAPOR. VAPOR HARMFUL. MAY CAUSE CANCER. HARMFUL IF INHALED. CAUSES EYE AND SKIN IRRITATION. POISON. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION. IN CONFINED AREAS WORKERS MUST WEAR FRESH AIRLINE REPSIRATORS. USERS SHOULD WEAR GLOVES AND PROTECTIVE CLOTHING. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. SEE THE PRODUCT MATERIAL SAFETY DATA SHEET (MSDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.</b>

\* Activated material

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

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