



**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, AWWA Spec C210-92, SSPC-Paint 16 and DOD 23236, Type I, Class 2.

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.

**PRODUCT FEATURES**

- Compatible with controlled cathodic protection
- Suitable for use in exposures as referenced in the following specifications\*
  - \* Corp of Engineers C-200, C200a
  - \* AWWA C-210-92 for exterior
  - \* SSPC-Paint 16
  - \* DOD 23236, Type 1, Class 2

**PRODUCTS**

DESCRIPTION	SIZE	SKU
Coal Tar Epoxy Activator	1 Qt.	C9502504
Coal Tar Epoxy Activator	1 Gal.	C9502402
Coal Tar Base Component	1 Gal.	C9578402
Coal Tar Base Component	4 Gal. filled in 5 Gal. Pail	C9578380

**COMPANION PRODUCTS**

**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 Krud Kutter® Original Cleaner Degreaser, commercial detergent or other suitable cleaner (SSPC-SP-1). 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 (50-75µ) 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 (50-75µ) 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.



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**PRODUCT APPLICATION (cont.)**

**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.

**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.

**CURING**

For water immersion service, allow 7 consistent days at 77°F (25°C). Below 50°F (10°C) allow 14 days prior to immersion service.

**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 Out Put	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.

**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 Impact (1/2 inch diameter)  
 TEST SAMPLE: Blast cleaned steel, 2 coats of material  
 RESULT: 100 inch 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 #275585).

	<b>TECHNICAL DATA</b>	<b>RO-53</b>
<b>RUST-OLEUM® C9578 SYSTEM COAL TAR EPOXY</b>		

**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>Practical Coverage at Recommended DFT (assumes 15% material loss)</b>		100-130 sq ft/gal. (2.5-3.2m <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 at 80°F, 1 hour at 100°F
<b>Dry Times at 75°F and 50% Relative Humidity</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>		For additional information, see SDS

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