

Coal Tar Epoxy

Technical Data Sheet (TDS)

Product Description

Crown Coal Tar Epoxy is a two-component, high build, polyamide-cured epoxy coal tar coating which can be applied at high film thickness in one coat.

Product features:

- Hi build 2-component epoxy/polyamide
- Tough, abrasion, and chemical resistant
- Excellent flexibility
- Brush, roller, or spray application.
- Interior/Exterior applications
- Good corrosion and salt water resistance.
- Product is lead, chrome, and heavy metal free

Recommended Uses

Coal Tar Epoxy is intended for industrial applications, either new build or maintenance. Coal Tar Epoxy is ideal for steel or concrete surfaces in industrial and marine environments.

Application Areas:

- Petroleum storage tanks
- Dam gates
- Non- potable applications
- Extreme Duty Structural coating

Note: Exterior applications will chalk, but will not detract from other qualities.

Mixing

Stir each container thoroughly prior to use.

Mix:

4 parts by volume of Coal Tar Epoxy [EX235]
 1 part by volume of Coal Tar Catalyst [EX273]

Product Characteristics

Typical Physical Properties	
Gloss:	Eggshell: 26-40 GU at 60°
Volume Solids: (Single Component Unreduced) EX235: EX273 4:1	57% ± 1%
Volume solids will vary by color	
VOC (Unreduced): EPA Method 24 EX235: EX273 4:1	364 g/l 3.038 lb /gal
VOC content will vary with each color	
Shelf Life:	
Component A	2 years
Component B	2 years
For unopened product (77°F (25°C))	
Weight Gallon : EX235 : EX273 4:1 Mixed	11.18 ± 0.2lb/gal
Pot Life: (77°F (25°C) and 50% RH)	16 Hours

Surface Prep

Surfaces to be finished must be clean, dry, and free of dirt, oil or any contamination that would adversely affect adhesion, protective properties, or appearance of the coating.

Prepare metal surfaces to SSPC-SP2, SSPC-SP3 for normal requirements.

Prepare metal surfaces to SSPC-5 white metal blast for immersion service.

For questions regarding other substrates contact your Crown Representative.

Application Method

Material can be applied by airless spray equipment.

Note: Not recommended for brush or roller application over large areas. Small touch-up areas may be brushed or rolled.

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Spray Gun Setup

Feed Type	Fluid Tip	Application Pressures (heel of gun)	Fluid Delivery
Airless	15-19 Thou	2,000 -3,000 psi	

Note: Do not spray catalyzed material with heated spray equipment.

Spray Viscosity

Supplied Viscosity- [77°F (25°C)]	
Stormer Viscometer	100 -115 KU

Note: Material is packaged at a viscosity requiring little or no reduction for application by airless spray equipment.

Note: Spraying viscosity and thinning will depend on ambient conditions, spray equipment used, and the desired surface finish.

IF THINNING IS REQUIRED:

The recommended solvent is TS145 HAP Free Reducer.

Film Build

Coal Tar Epoxy has a recommended film build thickness of:

Wet: WFT Unreduced	14.0 – 17.5 mils	355 – 445 microns
Dry: DFT	8.0 – 10.0 mils	200 – 250 microns

Theoretical coverage at 1.0 mil (25 microns).
 DFT: 914 ft² per gallon at 100% transfer efficiency.

Dry Times

	70°F (21°C)
To Touch	1 Hour
To Handle	4 Hours
To Recoat	4 Hours
Through Dry	18 Hours
Immersion Service	7 Days

Optimum drying conditions are 60°F to 90°F (16°C to 32°C) at 50% R.H. Lower temperatures and high humidity will slow dry time. Surface must be dry and at least 5°F(3°C) above the dew point.

Note: Product may also be force cured to enhance dry. Force cure temperatures in the range of 110-180°F (43 - 82 °C) may be utilized to accelerate solvent evaporation and speed oxidation.

Topcoating Information

Coal Tar Epoxy may be topcoated with the entire range of Crown Topcoats.

Clean Up

Clean all equipment immediately after use with TS-145 HAPS Free Reducer for spray guns and line, pots, and other equipment.

Follow manufacturer's safety recommendations when using any solvent.

Note: Due to limited potlife, never leave catalyzed paint in spray equipment.

Ordering Information (sizing)

Package sizes available:
 5-gallon kits

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Environmental Conditions

For optimum coating performance product, substrate and ambient temperature should be above 50°F (10°C). To prevent condensation during application the surface temperature must be 5°F (3°C) or more above the dew point.

Note: For use outside this range please contact your Crown Representative.

Specifications

Test	Method	Result
Salt Spray / Corrosion	ASTM B117	400 hours. no field rusting, less than 1/8" creep from scribe
Adhesion:	ASTM D3359	5A; 100% B-1000 panel
Impact resistance	ASTM D2794	80 lbs direct 40 lbs reverse
Flexibility	ASTM D522	1/8 mandrel bend: Pass

Storage Conditions

Storing partially used container uncatalysed:
Pour a small amount of the recommended thinner over the surface. Do not stir. Replace lid securely. Store away from heat or open flame.

Mix thoroughly before reusing.

Safety Precautions

Please refer to all Safety Data Sheets (SDS) before using this product. SDS sheets can be obtained by contacting Crown Paint.