

SELECTION DATA

GENERIC TYPE: Epoxy coal tar. Hardener added prior to application.

GENERAL PROPERTIES: A heavy duty, high build, epoxy coal tar coating for the protection of steel and concrete in severe service. Can be applied at thicknesses up to 300 microns per coat. Cures to a hard, smooth finish, simple 1:1 mixing ratio. Both components have low viscosity resulting in easy mixing.

RECOMMENDED USES: lining for tanks, piping, trenches, sumps and as heavy duty maintenance coating for steel and concrete - splash, spillage and fumes. Widely used for protection of offshore structures, marine installations, pilings. Also as lining for barges and tankers carrying sour crude, petroleum products and salt water ballast. Recommended for concrete and steel surfaces in sewage treatment plants, paper mills, chemical plants, etc. Excellent protection for underground surfaces.

NOT RECOMMENDED FOR: Immersion in aromatic or ketone solvents; strong oxidising acids.

CHEMICAL RESISTANCE GUIDE:

<u>Exposure</u>	<u>Immersion</u>	<u>Splash & Spillage</u>	
		<u>Spillage</u>	<u>Fumes</u>
Acids	Very Good	Excellent	Excellent
Alkalies	Very Good	Excellent	Excellent
Solvents	Fair	Good	Very Good
Salt	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

TEMPERATURE RESISTANCE (non-immersion):

Continuous:	93°C
Non-continuous:	121°C

For immersion, temperature depends on exposure, but maximum is 54°C.

TOPCOAT REQUIRED: None required. May be topcoated with Carboline anti-fouling paints as directed. Coal tar bleed-through is likely with most topcoats.

FLEXIBILITY: Fair

WEATHERING: Good. Will chalk on exterior exposure; however, this will not affect durability.

ABRASION RESISTANCE: Very Good.

PRIMER REQUIRED: Coating is self-priming on concrete surfaces and may be used as a two coat system directly over steel. Can also be applied over steel primers. When an inorganic zinc primer is used, an epoxy tie-coat is recommended.

COMPATIBILITY WITH OTHER COATINGS: Obtain specific recommendations before applying over old coatings.

SPECIFICATION DATA

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL:

	<u>By Volume</u>
POLY-TAR	75% ± 2%

RECOMMENDED DRY FILM THICKNESS PER COAT: 200 microns

THEORETICAL COVERAGE*: 3.75 sq. metres per litre at 200 microns DFT.

* **NOTE:** Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.

SHELF LIFE: Two years.

GLOSS: High initially, becomes flat.

COLOUR: Black and Chocolate.

FLASH POINT: Pensky-Martens Closed Cup.

POLY-TAR - Base	26°C
POLY-TAR - Hardener	14°C
Thinner # P10	23°C

RECOMMENDED DRY FILM THICKNESS PER APPLICATION:

- Steel - minimum
- 400 microns self-primed
 - 200 microns over compatible epoxies
 - 400 microns minimum when used in immersion service.

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APPLICATION INSTRUCTIONS

PRECAUTIONS: When applying by brush or roller provide adequate ventilation during application. When applying by spray, material should be applied in a spray booth fitted with an effective exhaust system and the operator must wear a positive pressure air supplied respirator.

SURFACE PREPARATION:

Steel: For immersion service, blast to White Metal in accordance with AS.1627 Part 4 Class 3, to obtain a 50- to 75-micron profile. For non-immersion service, a commercial blast in accordance with AS.1627 Part 4 Class 2, is preferred. Power tool cleaning is acceptable with specific recommendation.

Concrete surfaces must be clean and dry and roughened either by acid etching, or light blasting.

Do not apply when the surface temperature is less than 2°C above the dew point.

Excessive humidity or condensation on surface during curing may result in a surface haze, or blush, which must be washed off with water before recoating.

Special thinning and application techniques may be required above or below normal conditions.

APPLICATION DATA

METHOD OF APPLICATION: Conventional or airless spray preferred. May be brushed, or rolled but more coats will be needed to achieve film thickness.

SUGGESTED SPRAY EQUIPMENT: Guns:

Conventional	Fluid Tip	Aid Cap
Binks 230	2086	67PF
DeVilbiss JGA	D	64
Samson SS2	118	F18

Use a 13-mm min. ID Material Hose.

Airless: Pump Ratio
Reversible tip of 0.533- to 0.666-mm orifice and pump pressure of 2,400 psi. Use 13 mm min. ID Material Hose.
Other equipment may be more suitable for specific applications.

POT LIFE: 2 hours @ 25°C. Pot life ends when coating loses body and begins to sag.

THINNER USED: Thinner No. P10 (Up to 25% for spraying). Amount of thinner will vary depending on weather conditions.

APPLICATION TEMPERATURES:

	<u>Material</u>	<u>Surfaces</u>
Normal	18-29°C	16-35°C
Minimum	13°C	10°C
Maximum	32°C	49°C
	<u>Ambient</u>	<u>Humidity</u>
Normal	16-32°C	20-60%
Minimum	10°C	0%
Maximum	49°C	85%

DRYING TIMES: (at recommended thickness)

<u>Between Coats</u>		<u>Final Cure</u>	
10°C	4 days	10°C	14 days
16°C	48 hours	16°C	12 days
24°C	24 hours	24°C	7 days
32°C	12 hours	32°C	4 days

NOTE 1: If the curing time is exceeded or if the coating is exposed to sunlight for more than 36 hours, the surface must be abraded and solvent swabbed before re-coating.

NOTE 2: Force curing at elevated temperatures is suggested for all tank linings. Thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapour concentration from reaching the lower explosion limit for the solvents used. In addition to proper ventilation, fresh air respirators or fresh air hoods must be used by all application personnel. Where flammable solvents exist, explosion-proof lighting equipment must be used. Hypersensitive persons should wear clean protective clothing, gloves and protective cream on face, hands and all exposed areas.

CLEAN UP: Use Thinner No.P2.

STORAGE: Store in unopened containers under proper conditions away from heat and moisture.

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Application Data: The figures quoted for pot life and drying/curing times after mixing the components are not definitive. They are dependent on job site conditions such as volume of mixed material, ambient and steel temperature variations, weather and ventilation, and influenced by the previous storage conditions of the components, and equipment used.

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