

# FARBERTITE WATER-BASED COAL-TAR PROTECTIVE COATING A Versatile Industrial Coating for Aggressive Environments Product Data Sheet

# **Description:**

**FARBERTITE** is a coal tar compound containing an inert mineral filler and a corrosion inhibitor suspended in a water-based system. It contains no asphaltic material, resin, acid, caustic alkali, sulfur or compounds of sulfur. It contains no volatile ingredients that are toxic.

# **Uses:**

- Bridge Coating Undersea Surfaces Batching Bins
- Pipe Coating Salt Trucks Electrical Conduit
- Ship Coating Sedimentation Tanks Floats
- Sewage Treatment Plants Concrete Reservoirs Fence Posts
- Seals Concrete Trash Containers Equipment Supports
- Seals Asphalt Beams at Grade Marine Structures

# **Advantages:**

- Dries to provide a tough continuous durable flexible coating for metals, concrete and many other materials.
   FARBERTITE will bond permanently to any clean surface, damp or dry, and is applied cold without the aid of a primer. FARBERTITE will not run or sag on vertical surfaces.
- When cured, is not affected by fresh or salt water and will withstand many common acids and alkalis. **FARBERTITE** will resist a wide range of temperatures without failure of the coating.
- **FARBERTITE** is a non-flammable coating and will not support combustion or explode in any state, either wet or dry.
- **FARBERTITE** is easy to apply. **FARBERTITE** can be sprayed (air or airless), brushed, rolled or dip coated. **FARBERTITE** requires no thinning or special mixing, use directly from shipping container after mixing.

#### **INSTALLATION:**

All surfaces to be coated must be cleaned of any film, scale, loose material, oils, grease and any other foreign material that will prohibit bond of the **FARBERTITE**. Any holes or uneven cracks or joints should be repaired and leveled prior to the application of **FARBERTITE**. Surface may be damp. Oil or grease contaminated surfaces should be cleaned by acid wash (20% muriatic solution) and thorough rinsing.

Apply in good weather when air, material and surface temperatures are 50°F (10°C) and rising. Dew and rain on product while uncured may cause surface to blush and brown and may impair its cure and intercoat action.

Metal — White metal blast (SSPC SP 5-63) new surfaces. Brush blast (SSPC SP 7-63) contaminated or previously coated surfaces.

Concrete — Commercial blast (SSPC SP 6-63) new surfaces. Brush blast (SSPC SP 7-63) contaminated or previously coated surfaces

# Mixing:

Mix solution for 5 minutes or until solution becomes uniform using a mechanical mixer.

### **Application Equipment:**

Brush: Stiff brush

Roller: Rug-type roller

Conventional spray:

Gun: Binks Model 2001 Gun

67 Fluid nozzle (.086) 67PD Air nozzle

Hose: Min. 3/4" (2.0 cm) ID solvent resistant

Tank: Double regulated bottom outlet pressure tank with follower plate. Oil and water extractor.

Pump: Binks B4F 21/2:1 Ratio at 12 GPM

Airless spray:

Gun: Airless 1M Mastic Spray Gun

Tip: .031—.036 (.787—.914) Tip

Pump: Binks B8DX 38:1 ratio pump, mounted on ram with follower 50 mesh Filter-Surge chamber assembly

3/8" (1./0 cm) Nylon or Teflon lined high pressure hose

### **Application Methods:**

<u>Brush\Roller:</u> The coating should be daubed on or spread uniformly by roller. Do not brush out the surface.

Apply a minimum of two coats, leaving no holidays; apply the second coat at right angles to the

first coat.

Spray: Typical spray installation is accomplished using a 30:1 or greater airless unit. Use largest

available nozzle and apply in a single uniform coat.

On Steel: Apply as directed above, if a small amount of rust appears on the surface after several years,

the coating was applied too thin. Corrective measures consist of only adding another coat over the rust spots. It is not necessary to remove the coating and start over. After application, the corrosion inhibitor may bring some rust spots to the surface which is normal. The metal beneath

will be clean and protected.

On Concrete: Apply as directed above, the coating will form a waterproof membrane over the concrete and

will also protect it from leaching by salt water, acids and other substances. On fresh concrete it will also act as a curing compound. **FARBERTITE** forms an extremely strong bond to sound

and well prepared concrete surfaces.

# **Coating Thickness:**

Metals: Apply at the rate of 200 square feet per gallon (5 m<sup>2</sup> per liter) for thin coatings, down to 75

square feet per gallon (1.9 m<sup>2</sup> per liter) for thick coatings. Final film thickness should be 10 to

20 mils (254 to 508 µm) dry, in proportion to the corrosiveness of the environment.

<u>Concrete:</u> On surfaces to be immersed in water apply two coats, each to cover no more than 100 square

feet per gallon (2.5 m<sup>2</sup> per liter). On surfaces not subject to constant immersion, lesser

thickness may be used but a continuous membrane must be formed.

Asphalt Concrete: Pour **FARBERTITE** onto the surface and spread with a squeegee at a rate of about 75 sq. ft.

per gallon (1.9 m<sup>2</sup> per liter).

#### **DRYING TIME:**

Allow 4 hours to be dry to the touch; 24 hours to cure under normal conditions; 72 hours to cure in damp weather or in poorly ventilated areas. Provide temporary ventilation measures during application and curing under indoor conditions. The first coat must be cured before the second coat can be applied. Water must not come into contact with the coating until the cure is complete. Once cure is complete, the product cannot be removed with water. High temperature surfaces, such as chimneys or smoke stacks, should be heated slowly the first time after application of FARBERTITE. Slow heat rise will drive off all moisture and prevent blistering or cracking. Once the membrane is cured by heat, no damage will occur.

## **TECHNICAL DATA:**

Color: FARBERTITE is brownish black in color when fully cured.

Packaging: FARBERTITE is available in 5 gallon (18.9 L) pails and 55 gallon (208.2 L) drums through IPA

Systems Distributors.

Mixing Ratio: Apply directly from the container after mixing. DO NOT add additional water.

Clean-up: Cleaning is by hot water when material is wet. Once dried use a solvent to clean up.

Shelf Life: One year in unopened container. Do not expose to freezing.

# **Physical Properties:**

Meets U.S. Federal Military Specification Mil C 15203C (Docks)

Specific Gravity 1.2

Weight per Gallon 10 lbs. (4.5 kg)

pH 6.2 Viscosity (k.u.) (Stormer Viscometer @ 77°F) 96

(Reid @ 25°C)

Vapor Pressure ASTM D 323 3 psi (20.7 kPa)
Flash Point ASTM D 92 – open cup 268°F (131.1°C)
Firepoint 598°F (314.4°C)

Resistance to flow with heat (ASTM D466)

No slide to 120°F (44.4°C)

Sag None at application temperatures up to 120°F (44.4°C), resistance to

heat cure up to 300°F (144.4°C)

Electrical Insulation (resistivity per cm

thickness)

3,300 ohms, 1 mil (25.4 µm) thickness resists 600 volts

Vapor Barrier Excellent
Welding Test (using coated metal plates) Excellent

Flexibility after Curing

No cracking when applied to tin surface and bent over 1/8 inch (3.2)

mm) rod

Percent Solids by Weight 50%

# **Resistance to Specific Chemicals:**

# **Inorganic Chemicals**

Ammonium Chloride Good
Hydrogen Sulfide Good
Hydrochloric Acid Good
Nitric Acid – Dilute Good
Nitric Acid – Concentrated Poor
Sodium Chloride (Salt Spray) (ASTM B 117, 5% Good sodium chloride @ 95°F (33.9°C) for 500 hrs)

Sodium Hydroxide

To 5% solution Good

Over 5% solution Poor

Sodium Hypochlorite Poor

Sulfuric Acid – fuming @260°F (126.7°C) for 240 Excellent hrs

**Organic Chemicals** 

Acetic Acid Good
Acetone Poor
Alcohol – Amyl, propyl, butyl, ethyl Good

Aliphatic hydrocarbons (crude) Good to Excellent

Aromatic and chlorinated hydrocarbons Poor
Carbon Tetrachloride Poor
Citric Acid solution Good
Lactic Acid Good
Methyl ethyl ketone Poor

#### **TEST REPORTS:**

Ambric Testing & Engineering Associates, Inc. — Viscosity: A.S.T.M. D562/55; Drying Time: F.T.M.S. No. 141A, Method 4061.1; Acid Resistance: Hydrochloric Acid, Sulfuric Acid; Alkali Resistance: Sodium Hydroxide coated onto Steel, Copper, Aluminum; Fire Resistance (will not support combustion); Resistance to Flow at High Temperatures; Salt Spray Resistance; Cold Temperature Adhesion (Slam Test); Abrasion Resistance by Sand Blasting; Resistance to Oil; Resistance to Alligatoring; Water Absorption; Water Content; Ash Content; Solids Content. Water Vapor Transmission; ASTM C 355/64. Mercury Content: Less than 1 PPM.

#### LIMITATIONS:

Do not install **FARBERTITE** unless substrate and air temperature are at least 50°F (10°C) and not expected to drop below 50°F (10°C) within 24 hours. Do not apply when the surface temperature exceeds 100°F (32.2°C). DO NOT PERMIT PRODUCT TO FREEZE; if frozen, material is not useable. Maximum temperature for **FARBERTITE** coated surfaces in service is 150°F (65.5°C) for dry heat and 110°F (43.3°C) for moist heat.

## **CAUTION - FOR INDUSTRIAL USE ONLY:**

Review Material Safety Data Sheet (MSDS) before using this product. Contains coal tar. Avoid contact with eyes and skin. In case of eye contact, flush eyes with plenty of cold water and contact a physician immediately. Do not take internally. If swallowed, do not induce vomiting. Contact a physician immediately. Use with good ventilation. Avoid breathing of vapor. In confined areas, good forced ventilation must be used. Do not use around food products or where odor may penetrate to cause an odor problem. Once cured, material odor ceases.

#### WARRANTY

This product is warranted and guaranteed to be of good quality. Manufacturer, as its sole and exclusive liability hereunder, will replace material if proved defective. THIS WARRANTY AND GUARANTEE ARE EXPRESSLY IN LIEU OF ALL OTHERS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND MAY NOT BE EXTENDED BY REPRESENTATIVES OR ANY PERSONS, WRITTEN SALES INFORMATION, OR DRAWINGS IN ANY MANNER WHATSOEVER.

While the manufacturer recommends uses for the product based on tests believed reliable, no warranties, express or implied, or guarantee can be given as to particular methods of use or application, nor can performance be warranted, expressly or impliedly, or guaranteed under special conditions. Distributors, salespersons or company representatives are NOT authorized to extend or vary any warranties or guarantees beyond those outlined herein nor may the manufacturer's or seller's limitation of liability be waived or altered in any manner whatsoever.

#### **Distribution:**

Protection Engineering – Pittsburg, California Telephone 925.427.6200 or Toll free 800.878.8837 Website: www.corrosioncoatings.com Email: info@corrosioncoatings.com

Manufactured by: IPA Systems, Inc - Philadelphia, PA Copyright © 2003 IPA Systems, Inc.