



Dudick inc.

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PROTECTO-COAT PS

**ELASTOMERIC POLYSULFIDE
COATING**

FEATURES

State of Florida:
Secondary Containment Approval EQ-510
Self-Priming
VOC Compliant

RECOMMENDED APPLICATIONS

- Lining for interior of carbon steel tanks and vessels
- Lining for concrete tanks, secondary containment areas, sumps and trenches
- Coating for exterior protection of concrete tank or structures.
- Flexible coating for protection of multiple substrates such as steel and concrete, steel and fiberglass.
- Surface tolerant coating for atmospheric exposures.

CHEMICAL RESISTANCE

Resistance Properties:

- Aliphatic hydrocarbons including unleaded gasoline
- Toluene and higher boiling aromatics
- Fuel Oil
- Crude Oil
- Butyl Acetate and higher boiling esters
- Most acids and bases

**TEMPERATURE LIMITS
(METAL APPLICATIONS)**

Maximum Service Temperature: 375°F (190°C) in continuous service (dry). For immersion, contact Dudick Inc. for specific recommendations.

COLORS:

Gray Yellow Cirrus Gray
Chocolate Brown Clay Tan

***Please Note:** The same activator is not used in all colors.

PHYSICAL PROPERTIES

Color	Grey
Tensile Strength	450-500 psi
ASTM D-412	
Elongation	20%
ASTM D-412	

*7 days @ 77°F

SPECIFICATIONS

Protecto-Coat PS shall be a two component polysulfide elastomeric coating as manufactured by Dudick, Inc. Materials shall be spray applied in accordance with the manufacturers recommended practices.

THE PROTECTO-COAT PS SYSTEM

Protecto-Coat PS is a two-component, high solids, elastomeric, chemically resistant polysulfide coating. Consists of base and activator which when mixed produces the final color.

Primer 67 is the recommended holding primer designed to prevent abrasive blasted steel from developing rust bloom prior to the application of the **Protecto-Coat PS**. Concrete can be primed to aid in the “wetting out” required for good bonding and retarding out-gassing.

*** Refer to Primer 67 bulletin**

Topcoat: The unique elastomeric polysulfide binder in **Protecto-Coat PS** provides high film integrity, and excellent chemical resistance required for prolonged substrate protection.

ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL

APPROXIMATE SQUARE FEET PER GALLON	
Protecto-Coat PS	
@ 15-20 mils DFT	80-100 ft ² / gallon
@ 30-40 mils DFT	40-50 ft ² / gallon
@25-30 mils DFT	50-60ft ² / gallon

*Quantities shown are for estimating purposes only. Actual field usage may vary.

SUGGESTED FILM BUILD (DFT)

15-20 mils DFT
 30-40 mils minimum total DFT.
 Two coats required for immersion service.

For secondary containment:
 Two coats @ 25-30 mils DFT per coat.

PACKAGING

Available in 3 gallon and 15 gallon units.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Metal: Metal surfaces must be abrasive blasted to an appropriate finish.

Immersion and heavy spillage service: White Metal, SSPC SP 5 or NACE #1, minimum 3.0 profile. Heavy non-immersion service (i.e. fumes and spillage): Near white, SSPC SP 10 or NACE #2, minimum 2.0 mil profile. Atmospheric service: Commercial SSPC SP 6 or NACE #3, minimum 2.0 mil profile.

Concrete: Concrete must be prepared mechanically to remove the surface laitance. Oils, grease or other contaminant must be removed prior to surface preparation. Concrete must be free of curing compounds and form release agents. Surface texture should be similar to 40-60 grit sandpaper or the visual standard, CSP-5 from the International Concrete Repair Institute **with pea gravel exposed**. The prepared surface should have a nominal tensile strength of 250 psi per ASTM D-4541.

All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D-4263.

Additional surface preparation will be required if a 40-60 grit texture **with exposed pea gravel** is not achieved and the surface laitance not completely removed with the first mechanical preparation procedure.

Mechanical preparation removes laitance, exposing honeycombs or voids beneath the surface, which must be filled with **Scratch-Coat 300**. (Refer to separate product bulletin).

APPLICATION SPECIFICATIONS

Substrate temperature for both concrete and metal must be between 50°F and 110°F.

Relative humidity must not exceed 85%.

Substrate temperature must be 5°F above the Dew Point.

PROTECTO-COAT PS MIX RATIO (BY VOLUME)

BASE	Premeasured unit
ACTIVATOR	Premeasured unit

Pot life of the mixed **Protecto-Coat PS** will depend on the temperature. To prevent material waste and avoid damage to equipment, do not mix more material than can be used.

POT LIFE

45 minutes @ 77°F.

Higher temperatures will greatly decrease pot life and will make application by heated plural component spray mandatory.

Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

APPLICATION SPECIFICATIONS

- Apply by heated plural component airless spray for best results. Small areas can be brushed.
- Pour and trowel.



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Manufacturers listed below are a guide. Others may be used. Changes in pressure and tip size may be required to achieve proper application.

HEAT PLURAL COMPONENT SPRAY

Use heated plural component equipment.

Pump: Capability to product 3000 psi at the gun (e.g. Graco Bulldog, EH333 or GM5000)

Fluid Hose: 3/8 x 100' hose length. For longer hose, to avoid excessive pressure drop, use 1/2" i.d. up to 200' with 3/8" i.d. x 25' whip.

Airless Gun: Graco 207945

Minimum pressure to avoid fingering: 3000 psi at nozzle.

See Additional Comments #2

ADDITIONAL COMMENTS

1. **Protecto-Coat PS** can be applied on vertical surfaces between 15-20 mils. For the uses above 15-20 mils DFT add thickener at a rate of 1/2 lb. per 5 gallon mix. Note: The addition of this thickener might affect the chemical resistance properties. Consult Dudick Inc. for specific recommendations.
2. For more detailed information on plural component recommendations, please refer to Dudick, Inc. Advisory 96-1 Plural Component Spray.
3. Use of a penetrating primer under coatings or linings for concrete can be an effective means of minimizing out-gassing. If the use of a penetrating prime is desired, use **Primer 67**. Please consult Dudick, Inc. for recommendations. Also, please refer to the **Primer 67** data sheet.

CURE CYCLE FOR PROTECTO-COAT PS

Cure Times (Hours @ 77°F , 25°C and 50% R.H.):

To Touch	4 hours
To Recoat	6 hours minimum 48 hours maximum
Hard Dry	24 hours

If these recoat times are exceeded, consult a Dudick representative; sanding or abrasive blasting may be required before the next coat. Recoat times are dramatically reduced when the coating is exposed to direct sunlight.

Application of **Protecto-Coat PS** in direct sunlight may lead to blistering, pinholes, or wrinkling due to out-gassing of air in the concrete and high substrate temperatures. Double priming, shading, or evening application may be required. Consult a Dudick representative.

CLEANING

Use S-14 Thinner to clean.

SHIPPING

Refer to Material Safety Data Sheets.

STORAGE

Warning: All Dudick products classified by DOT with white, yellow or red labels must not be mixed or stored together as an explosive reaction can occur.

All products should be stored in a cool, dry area, away from open flames, sparks, or other hazards.

When properly stored in their original, unopened containers at 50°F-75°F, **Protecto-Coat PS** has a six-month shelf life. Storage in direct sunlight or excessive heat will reduce working time and shelf life.

SAFETY

M.S.D.S: Material Safety Data Sheets must always be read before using products. **Protecto-Coat PS** systems are intended for application by experienced, professional personnel. Dudick, Inc. can supply supervision to help determine that the surface has been properly prepared, the ingredients correctly mixed, and the materials properly and safely applied.

If **Protecto-Coat PS** materials are to be applied by your own personnel or by a third party contractor, please be sure that they are aware of the following safety precautions:

- Exposure to resins and hardeners through direct skin contact and/or inhalation may cause severe dermatitis reactions in some people. Cleanliness of the skin and clothing is critical and must be of paramount concern.
- Fumes are flammable and heavier than air. Proper ventilation should be maintained to minimize breathing of concentrated fumes.
- Suitable respirators should be used during application.
- Safety glasses, gloves, and suitable protective clothing must be worn at all times during application.
- If contact with hardeners occurs, remove any clothing involved and flush the skin with flowing water. Discard the clothing. Do not attempt to wash and reuse it. **Protecto Coat PS** liquid can be removed with **S-14 Thinner**.
- Keep open flames and sparks away from the area where materials are being mixed and applied.
- If a rash occurs, remove the individual from the work area and seek a physician's care for dermatitis.
- In case of eye contact, flush with water for at least 15 minutes and consult a physician.
- If swallowed, do not induce vomiting; call a physician immediately.

NOTE: Dudick, Inc. ("Dudick") warrants all goods of its manufacture to be as represented in its catalogs and that the manufacture of its products by its employees or sub-contractors shall be performed in a workmanlike manner. Dudick's sole obligation under this warranty shall be to replace any material which its examination shall disclose to be defective. Dudick makes no warranty concerning the suitability of its product for application to any surface, it being understood that the goods have been selected and the application ordered by the Purchaser. DUDICK, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THE GOODS SHALL BE MERCHANTABLE OR THAT THE GOODS ARE FIT FOR ANY PARTICULAR PURPOSE. THE WARRANTY OF REPAIR OR REPLACEMENT SET FORTH HEREIN IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES ARISING BY LAW OR OTHERWISE; AND DUDICK INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWN TIME, DAMAGES TO PROPERTY OF THE PURCHASER OR OTHER PERSONS, OR DAMAGES FOR WHICH THE PURCHASER MAY BE LIABLE TO OTHER PERSONS, WHETHER OR NOT OCCASIONED BY DUDICK'S NEGLIGENCE. This warranty shall not be extended, altered or varied except by written instrument signed by Dudick and Purchaser.

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