Protecto-Coat PS

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Elastomeric Polysulfide Coating
Description	A two-component, high solids, elastomeric, chemically resistant polysulfide coating.
Features	• Resistance to vibration, impact, shock, and thermal cycling • May be used to repair polyurethane linings • Flexible • Chemical Resistant • VOC Compliant
Typical Uses	• Carbon steel tanks and vessels • Concrete tanks • Secondary containment areas • Sumps and trenches • Concrete tank or structures
Color	Grey (0700)
Primer	For maximum performance, all metal surfaces should be primed with Dudick Primer 67 series, but primer may not be needed for mild, non-immersion service. Concrete **must** be primed to aid in the “wetting out” required for good bonding. Use Dudick Primer 67 series or other primer recommended by Dudick or Carboline technical service.
Dry Film Thickness	15 - 30 mils (381 - 762 microns) depending on application 15 - 20 mils (381 - 508 microns) max per coat for vertical applications Two coats required for immersion.
Solids Content	By Volume 100%
Theoretical Coverage Rate	1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns) 107 ft²/gal at 15.0 mils (2.6 m²/l at 375 microns) 53 ft²/gal at 30.0 mils (1.3 m²/l at 750 microns) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 0 g/l
Dry Temp. Resistance	Continuous: 375°F (191°C)
Chemical Resistance	• Aliphatic hydrocarbons including unleaded gasoline • Toluene and higher boiling aromatics • Fuel Oil • Crude Oil • Butyl Acetate and higher boiling esters • Most acids and bases

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.

SUBSTRATES & SURFACE PREPARATION

Steel	Immersion and heavy spillage service: White Metal, SSPC SP 5 or NACE 1, minimum 3.0 mil 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 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. Additional surface preparation will be required if 40-60 grit texture with exposed pea gravel is not achieved and the surface laitance not completely removed with the first mechanical preparation procedure. The prepared surface shall have a tensile strength of 250 PSI per ASTM D7234. All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D4263.

PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	Results
Elongation ASTM D412	20%
Tensile Strength ASTM D412	450 – 500 PSI

MIXING & THINNING

Mixing	This product is normally applied by heated plural component airless spray. Mix each component separately to a smooth, uniform consistency. Any settling in the container must be thoroughly scraped and re-dispersed. For secondary containment or horizontal applications, batch mixing may be used when using brush, roll, or trowel.
Thinning	Not recommended
Ratio	**1:2** by volume (A:B)
Pot Life	45 minutes @ 77°F (25°C)

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Plural Component Airless Spray	Equipment: 2:1 fixed-ratio plural component spray equipment with heated hoppers, in-line heaters, and heated hose bundles. The mixing ratio for this product by volume is 1 Part A to 2 Part B. Material Hose: A: 3/8” I.D. (min.); B: 1/2" I.D. (min.) Static Mixers: Two 1/2" x 12-element Whip Hose: 3/8" x 3-6 foot whip hose Tip Size: 0.021”-0.027” Optimal material temp at the tip: 100-105°F (38-41°C)

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Brush & Roller (General)

Once mixed, pour the product directly onto the primed substrate. The mix should be spread with a 15-20 mil notched squeegee, trowel or gauge rake. After spreading the material to the proper thickness, backroll or roll with a porcupine roller to level and de-aerate.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	77°F (25°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	140°F (60°C)	110°F (43°C)	110°F (43°C)	85%

For heated plural application, optimum material temperature should be 100ºF (38ºC) at the tip.
For hand application, optimum material temperature should be 80ºF (27ºC).
Substrate temperature must be 5ºF (3ºC) above the dew point.

CURING SCHEDULE

Surface Temp.	Touch	Minimum Recoat Time	Foot Traffic	Maximum Recoat Time	Cure for Service
77°F (25°C)	4 Hours	6 Hours	24 Hours	48 Hours	48 Hours

CLEANUP & SAFETY

Cleanup

Use S-10 Thinner or Carboline Thinner 2 to clean equipment.

Safety

Read and follow all caution statements on this product data sheet and on the SDS. Employ normal safety precautions. Keep container closed when not in use.

Ventilation

Ventilation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. Use MSHA/NIOSH approved air respirators as needed.

Caution

Fire and explosion hazards: This product contains less than 1% volatile components, however, vapors are heavier than air and can travel long distances, ignite and flash back. Eliminate all ignitions sources. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Packaging

3 Gallon Kits:
Part A: 1 Gallons (in a 3.5 gal pail)
Part B: 2 Gallon (in a 3.5 gal pail)
15 Gallon Kits:
Part A: 5 Gallons (in a 5 gal pail)
Part B: 2 x 5 Gallons (in a 5 gal pail)

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 6 months Part B: 6 months
Storage	Warning: All Dudick products classified with DOT labels as either 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.
Shipping Weight (Approximate)	3 gallon kits: 42.9 lbs 15 gallon kits: 189 lbs

WARRANTY

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