Protecto-Coat 805

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Flake-filled, Vinyl Ester Coating
Description	A vinyl ester resin formulated specifically as a silica free lining and utilizes graphite flake fillers for resistance to a wide variety of acids, caustics, salts, oils and mild alkali solutions.
Features	• Excellent resistance to fluorinated chemicals • Exceptional resistance to inorganic and organic acids • Excellent caustic and alkaline solution resistance • Excellent abrasion resistance and hardness • FDA compliant • Low permeability
Color	Dark Gray (F748)
Primer	Primer 27 series
Dry Film Thickness	15 - 20 mils (381 - 508 microns) per coat 2 coats will produce a 30-40 mils (750-1000 microns) total dry film thickness which is recommended for immersion service.
Solid(s) Content	77% by volume
Coverage Rate	30-35 sq ft per gallon @ 30-40 mils total DFT
VOC Values	**As Supplied** : 87 g/l
Dry Temp. Resistance	Continuous: 250°F (121°C) Non-Continuous: 300°F (149°C)
Chemical Resistance	• Fluorinated Chemicals • Organic Acids • Oils • Inorganic Acids • Salts • Alkali Solutions

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.
Concrete	**Must be primed with Primer 27 or Primer 27C.** 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 (per SSPC SP-13/NACE No.6). Surface texture should be similar to 40-60 grit sandpaper or the visual standard, CSP 3 from the International Concrete Repair Institute (ICRI) with pea gravel exposed. The prepared surface shall have a minimum tensile strength of 250 PSI per ASTM D7234. All concrete substrates must be checked for moisture and pass the ASTM D4263 Plastic Sheet Test prior to product application.

SUBSTRATES & SURFACE PREPARATION

Ferrous Metal

Primer 27 is recommended to be used to promote better adhesion or as a holding primer in immersion service.
Immersion and heavy spillage service: White Metal, SSPC SP 5 or NACE No.1, minimum 3.0 mil profile.
Heavy non-immersion service (i.e. fumes and spillage): Near white, SSPC SP 10 or NACE No.2, minimum 2.0 mil profile.
Atmospheric service: Commercial SSPC SP 6 or NACE No.3, minimum 2.0 mil profile

Non-Ferrous Metals

Must be primed with Primer 27 for immersion service.
Prepare by abrasive blasting to SSPC-SP 17 Thorough Abrasive Blast to a minimum of 3 mils (75 microns) dense angular anchor profile.

PERFORMANCE DATA

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

Test Method	Results
Adhesion to Steel ASTM D4541	2,000 PSI
Flame Spread ASTM D635	<5 mm
Flexural Strength ASTM C580	5,000-5,200 PSI
Shore D Hardness ASTM D2240	75-80
Taber Abrasion ASTM D4060	23 mg
Tensile Strength ASTM C307	2,500-2,800 PSI
WVT ASTM E96	0.0022 perm. in.

MIXING & THINNING

Mixing

Mix separately to redisperse pigments and fillers. Then, add the correct amount of PH- 1 Hardener to the Part A and mix thoroughly until a uniform color is achieved.

Ratio

PH-1 Hardener Ratio @ Substrate Temperature:
50°F-70°F (10ºC-21ºC): 3-3.5 oz per gallon
70°F-90°F (21ºC - 32ºC): 2-3 oz per gallon

Pot Life

60 minutes @ 50ºF (10ºC)
40 minutes @ 75ºF (23ºC)
25 minutes @ 90ºF (32ºC)

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.

Airless Spray

- Pump Ratio: 45:1 or greater, capable of at least 1 GPM. Hopper or siphon feed is preferred.
- Filters: Ensure all filters are removed.
- Material Hose: 1/2" I.D. (min.), 4500 psi or greater rated.
- Tip Size: 0.25-0.31"
- Output PSI: 3000-3500 psi (min.)
- Gun: Airless gun rated for at least 4500 psi. Filter-free or front-fed gun is preferred

PTFE packings are recommended and available from the pump manufacturer.
When siphon feed is used, change the pail out as frequent as necessary to avoid exotherm of the catalyzed material.

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) | Brush or roller application may require additional coats to meet the specified dry film thickness.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	60°F (16°C)	60°F (16°C)	0%
Maximum	80°F (27°C)	110°F (43°C)	110°F (43°C)	90%

Substrate temperature must be 5ºF (3ºC) above the dew point.

CURING SCHEDULE

Surface Temp.	Minimum Recoat Time	Chemical Service	Maximum Recoat Time
50°F (10°C)	12 Hours	4 Days	5 Days
75°F (24°C)	4 Hours	24 Hours	4 Days
90°F (32°C)	3 Hours	10 Hours	3 Days

CLEANUP & SAFETY

Cleanup | Use S-10 Cleaning Solvent or Carboline Thinner 2 to clean tools and 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

1 Gallon Kits:
Part A: 0.97 Gallons (in a 1 gal can)
PH-1 Hardener: 4 oz (in a plastic bottle)
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5 Gallon Kits:
Part A: 4.85 Gallons (in a 5 gal pail)
PH-1 Hardener: 20 oz (in a plastic bottle)

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A: 6 months Part B: 6 months Material is not returnable after purchase.
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)	1 gallon kits: 15.25 lbs 5 gallon kits: 53.5 lbs

WARRANTY

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