

**SELECTION & SPECIFICATION DATA**

<b>Generic Type</b>	Flake-filled, Vinyl Ester Coating
<b>Description</b>	A thermosetting vinyl ester coating which utilizes flake fillers for resistance to a wide variety of acids, caustics, salts, oils and mild alkali solutions. It offers the most versatile protection in the Protecto-Coat line.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Exceptional resistance to inorganic and organic acids</li> <li>• Excellent caustic and alkaline solution resistance</li> <li>• Excellent abrasion resistance and hardness</li> <li>• FDA compliant</li> <li>• Low permeability</li> </ul>
<b>Color</b>	Dark Gray (F748), Medium Gray (0766), Light Gray (0725)
<b>Primer</b>	Primer 27 series
<b>Dry Film Thickness</b>	<p>15 - 20 mils (381 - 508 microns) per coat</p> <p>2 coats will produce a 30-40 mils (750-1000 microns) total dry film thickness which is recommended for immersion service.</p>
<b>Solid(s) Content</b>	77% by volume
<b>Coverage Rate</b>	30-35 sq ft per gallon @ 30-40 mils total DFT
<b>VOC Values</b>	<b>As Supplied</b> : 87 g/l
<b>Dry Temp. Resistance</b>	<p>Continuous: 250°F (121°C)</p> <p>Non-Continuous: 300°F (149°C)</p>
<b>Chemical Resistance</b>	<ul style="list-style-type: none"> <li>• Organic Acids</li> <li>• Oils</li> <li>• Inorganic Acids</li> <li>• Salts</li> <li>• Alkali Solutions</li> </ul>

**SUBSTRATES & SURFACE PREPARATION**

<b>General</b>	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.
<b>Concrete</b>	<p><b>Must be primed with Primer 27 or Primer 27C.</b></p> <p>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.</p> <p>All concrete substrates must be checked for moisture and pass the ASTM D4263 Plastic Sheet Test prior to product application.</p>

# Protecto-Coat 800

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## SUBSTRATES & SURFACE PREPARATION

<b>Ferrous Metal</b>	<p><b>Primer 27 is recommended to be used to promote better adhesion or as a holding primer in immersion service.</b></p> <p><u>Immersion and heavy spillage service:</u> White Metal, SSPC SP 5 or NACE No.1, minimum 3.0 mil profile.</p> <p><u>Heavy non-immersion service (i.e. fumes and spillage):</u> Near white, SSPC SP 10 or NACE No.2, minimum 2.0 mil profile.</p> <p><u>Atmospheric service:</u> Commercial SSPC SP 6 or NACE No.3, minimum 2.0 mil profile</p>
<b>Non-Ferrous Metals</b>	<p><b>Must be primed with Primer 27 for immersion service.</b></p> <p>Prepare by abrasive blasting to SSPC-SP 17 Thorough Abrasive Blast to a minimum of 3 mils (75 microns) dense angular anchor profile.</p>

## 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

<b>Mixing</b>	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.
<b>Thinning</b>	Not required. If needed, Styrene can be used to thin the coating or prime the pump.
<b>Ratio</b>	<b>PH-1 Hardener Ratio @ Substrate Temperature:</b> 50°F-70°F (10°C-21°C): 3-3.5 oz per gallon 70°F-90°F (21°C - 32°C): 2-3 oz per gallon
<b>Pot Life</b>	60 minutes @ 50°F (10°C) 40 minutes @ 75°F (23°C) 25 minutes @ 90°F (32°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.

<b>Airless Spray</b>	<ul style="list-style-type: none"> <li>• Pump Ratio: 45:1 or greater, capable of at least 1 GPM. Hopper or siphon feed is preferred.</li> <li>• Filters: Ensure all filters are removed.</li> <li>• Material Hose: 1/2" I.D. (min.), 4500 psi or greater rated.</li> <li>• Tip Size: 0.25-0.31"</li> <li>• Output PSI: 3000-3500 psi (min.)</li> <li>• Gun: Airless gun rated for at least 4500 psi. Filter-free or front-fed gun is preferred</li> </ul> <p>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.</p>
<b>Brush &amp; Roller (General)</b>	<p>Brush or roller application may require additional coats to meet the specified dry film thickness.</p>

## 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 5°F (3°C) above the dew point.

## CURING SCHEDULE

Surface Temp.	Minimum Recoat Time	Maximum Recoat Time	Cure Time
50°F (10°C)	12 Hours	5 Days	7 Days
75°F (24°C)	4 Hours	4 Days	5 Days
90°F (32°C)	3 Hours	3 Days	90 Hours

Protecto-Coat 800 must be recoated within 6 hours when exposed to direct sunlight. 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 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.

## CLEANUP & SAFETY

<b>Cleanup</b>	<p>Use S-10 Cleaning Solvent, Carboline Thinner 76 or Carboline Thinner 2 to clean tools and equipment.</p>
<b>Safety</b>	<p>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.</p>
<b>Ventilation</b>	<p>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.</p>

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## CLEANUP & SAFETY

<b>Caution</b>	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 ignition 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.
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## PACKAGING, HANDLING & STORAGE

<b>Packaging</b>	<b>1 Gallon Kits:</b> Part A: 0.97 Gallons (in a 1 gal can) PH-1 Hardener: 4 oz (in a plastic bottle) <hr/> <b>5 Gallon Kits:</b> Part A: 4.85 Gallons (in a 5 gal pail) PH-1 Hardener: 20 oz (in a plastic bottle)
<b>Shelf Life</b>	6 months, when properly stored in original, unopened containers at 50°F-75°F (10°C-24°C). Exposure to heat in excess of this temperature may cause premature gelling, reduced working time and shortened shelf life.  Material is not returnable after purchase.
<b>Storage</b>	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.
<b>Shipping Weight (Approximate)</b>	1 gallon kits: 15.1 lbs 5 gallon kits: 53.5 lbs

## WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.