

### SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	flake filled, thermosetting polyester coatings
<b>Designation</b>	<b>This is a product that Carboline is intending to drop from the product line. Please reach out to your Carboline Sales Representative for a product alternative.</b>
<b>Description</b>	Protecto-Coat 700 coating are distinct formulations designed to offer a wide range of high performance, suitable for many different industrial and manufacturing applications. Flake or graphite fillers enhance the protection necessary for specific chemical environments. The coatings are formulated for brush, roller or spray application.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Low Permeability</li> <li>• Conductive Version Available</li> </ul>
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>• Structural Steel</li> <li>• Water Storage Towers</li> <li>• Plating Lines, Exterior</li> <li>• Pickling Lines, Exterior</li> </ul>
<b>Color</b>	<ul style="list-style-type: none"> <li>• White and Gray (700)</li> <li>• Black (705)</li> </ul>
<b>Primer</b>	<p>Primer 27 is designed to prevent abrasive-blasted metal from developing rust bloom prior to the application of a Protecto-Coat 700/705 systems. For maximum performance, all metal surfaces should be primed, 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.</p> <p>Primer 27C is designed for applications on concrete where spark testing is required or specified.</p>
<b>Dry Film Thickness</b>	30 - 40 mils (762 - 1016 microns) per coat
<b>Solids Content</b>	By Volume 100%
<b>Theoretical Coverage Rate</b>	1604 ft <sup>2</sup> /gal at 1.0 mils (39.4 m <sup>2</sup> /l at 25 microns) 53 ft <sup>2</sup> /gal at 30.0 mils (1.3 m <sup>2</sup> /l at 750 microns) 40 ft <sup>2</sup> /gal at 40.0 mils (1.0 m <sup>2</sup> /l at 1000 microns) Allow for loss in mixing and application.
<b>Dry Temp. Resistance</b>	Continuous: 250°F Intermittent: 300°F
<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>• Chrome Plating 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.
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# Protecto-Coat 700

## PRODUCT DATA SHEET



### SUBSTRATES & SURFACE PREPARATION

<b>Concrete</b>	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 D-7234.
	All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D-4263.
<b>Metal</b>	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.

### PERFORMANCE DATA

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

Test Method	Results
Adhesion to Steel ASTM D-4541	2,000 PSI
Electrical Properties	1.5-2.0 Megaohms
Flame Spread ASTM D-635	<5 mm
Flexural Strength ASTM C-580	5,000-5,200 PSI
Shore D Hardness ASTM D-2240	75-80
Taber Abrasion ASTM D-4060	42 mg.
Tensile Strength ASTM C-307	2,500-2,800 PSI
WVT ASTM E-96	0.0022 perm.in.

### MIXING & THINNING

<b>Mixing</b>	Add the correct amount of PH-2 Red or Clear Hardener to the Protecto-Coat 700/705 and mix thoroughly until a uniform color is achieved. Apply at 15-20 mils WFT using a brush, spray or roller to an even, smooth finish.
	Primer 27C must be mechanically mixed for 1-2 minutes prior to adding the correct amount of PH-1 Hardener; apply by roller only. Use brush application for touch-up or repair.
<b>Ratio</b>	For maximum performance, prime all metal surfaces with Primer 27, mixed with the correct amount of PH-1 Hardener. Apply at 3-4 mils WFT with a brush, spray or roller. For mild non-immersion service, priming of metal may be omitted. The basecoat must be applied before rust bloom occurs.
<b>Pot Life</b>	60 Min @ 50°F
	40 Min @ 75°F
	25 Min @ 90°F

### 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>	<p>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: .25-.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.</p> <p>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>	Brush or roller application may require additional coats to meet the specified dry film thickness.

### APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	75°F (24°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	110°F (43°C)	110°F (43°C)	90%

### CURING SCHEDULE

Surface Temp.	Chemical Service	Maximum Recoat Time
50°F (10°C)	96 Hours	120 Hours
75°F (24°C)	24 Hours	72 Hours
90°F (32°C)	20 Hours	48 Hours

### CLEANUP & SAFETY

<b>Cleanup</b>	Use S-10 Cleaning Solvent to clean tools and equipment.
<b>Safety</b>	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.
<b>Ventilation</b>	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.
<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 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.

# Protecto-Coat 700

## PRODUCT DATA SHEET



## PACKAGING, HANDLING & STORAGE

Packaging	<b>1 Gallon Kits:</b> Part A: 0.97 Gallons (in a 3.5 gal. steel pail) Part B: 0.03 Gallons (in a 1 gal. metal/Box)
	<b>5 Gallon Kits:</b> Part A: 4.85 Gallons (in a 5 gal steel pail) Part B: 0.15 Gallons (in a 1 gal metal/Box)
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)	1 gallon kits: 16.9 lbs 5 gallon kits: 62.5 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 to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. 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. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.