

SELECTION & SPECIFICATION DATA

Generic Type	High solids, high performance, multi-functional epoxy coating
Description	A 100% solids, reinforced, premium epoxy coating for use as an internal tank lining. This product utilizes a hybrid curing agent to form a highly functional, densely cross-linked monolithic film. It is resistant to extremely corrosive solvents.
Features	<ul style="list-style-type: none"> • Meets all VOC Requirements • High strength and high abrasion resistance • Low odor • Excellent solvent resistance, including methylene chloride and ethylene dichloride
Typical Uses	<ul style="list-style-type: none"> • Containment areas • Structural steel • Solvent storage • Pump housings • Storage tanks
Color	Medium Grey (0766) Light Grey (0725)
Primer	<p>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.</p> <p>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.</p>
Dry Film Thickness	<p>15 - 20 mils (381 - 508 microns) per coat</p> <p>Two coats at a total DFT of 30-40 mils is required for immersion.</p>
Solids Content	By Volume 100%
Theoretical Coverage Rate	<p>1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns)</p> <p>107 ft²/gal at 15.0 mils (2.6 m²/l at 375 microns)</p> <p>80 ft²/gal at 20.0 mils (2.0 m²/l at 500 microns)</p> <p>Allow for loss in mixing and application.</p>
VOC Values	As Supplied : <50 g/l
Dry Temp. Resistance	<p>Continuous: 200°F (93°C)</p> <p>Non-Continuous: 250°F (121°C)</p>
Chemical Resistance	<ul style="list-style-type: none"> • Inorganic Acids • Alkali Solutions • Solvents (including methylene chloride and ethylene dichloride) • Oils • Salts

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.
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Protecto-Coat 1130

PRODUCT DATA SHEET



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
Compressive Strength ASTM C579	12,000 PSI
Flame Spread ASTM D635	<5 mm
Flexural Strength ASTM C580	6,000 PSI
Shore D Hardness ASTM D2240	92
Taber Abrasion ASTM D4060	58 mg
Tensile Strength ASTM C307	4,000 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.
This material develops high exotherm when in mass. Catalyzed materials must never be left unattended.

Ratio | Approximately 3:1 by volume (A:B)

Pot Life | Pot life of the mixed product will depend on the temperature. To prevent material waste and avoid damage to equipment, do not mix more material than can be used as below.
40 minutes @ 50°F (10°C)
25 minutes @ 75°F (21°C)
12 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.

Plural Component Airless Spray	Equipment: 3:1 fixed-ratio plural component spray equipment with heated hoppers, in-line heaters, and heated hose bundles Material Hose: A: 1/2" I.D. (min.); B: 3/8" 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)
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	60°F (16°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°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.	Cure for Service	Minimum Recoat Time	Maximum Recoat Time
50°F (10°C)	7 Days	20 Hours	5 Days
75°F (24°C)	7 Days	4 Hours	4 Days
90°F (32°C)	7 Days	2 Hours	3 Days

CLEANUP & SAFETY

Cleanup	Use S-10 Cleaning Solvent and 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 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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PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Packaging	1 Gallon Kits: Part A: 0.76 Gallons (in a 1 gal can) Part B: 0.24 Gallons (in a 1 gal can)
	5 Gallon Kits: Part A: 3.8 Gallons (in a 5 gal pail) Part B: 1.2 Gallons (in a 3.5 gal pail)
Shelf Life	Part A: 12 months Part B: 12 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: 14 lbs 5 gallon kits: 60.6 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.