

SELECTION & SPECIFICATION DATA

Generic Type	Reinforced novolac epoxy lining
Description	Protecto-Line 100XT uses several layers of amine cured, filled novolac epoxy resin to build up the protection that metal and concrete need in chemical manufacturing or processing operations. When fully cured, the separate elements lose their individual identity and become a single, monolithic lining.
Features	<ul style="list-style-type: none"> • Low Odor • Low Taber Abrasion • Meets all VOC requirements • Excellent Sulfuric Acid Resistance
Typical Uses	<ul style="list-style-type: none"> • Concentrated Acid Spills • Concentrated Caustic Spills • Floors, Trenches, Curbs and Pits • Steel and Concrete Tanks • Scrubbers • Ducts
Color	Clear (0000)
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 Primer 67 series or other primer recommended by Dudick or Carboline technical service.</p>
Dry Film Thickness	1/8" thick
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>Allow for loss in mixing and application.</p>
Dry Temp. Resistance	<p>Continuous: 200°F (93°C)</p> <p>Non-Continuous: 250°F (121°C)</p> <p>Immersion up to 180°F</p>
Chemical Resistance	<ul style="list-style-type: none"> • Concentrated Inorganic Acids • Dilute Organic Acids • Alkali Solutions • Solvents • Oils • Salts

SUBSTRATES & SURFACE PREPARATION

Steel	<p>Immersion and heavy spillage service: White Metal, SSPC SP 5 or NACE #1, minimum 3.0 mil profile.</p> <p>Heavy non-immersion service (i.e. fumes and spillage): Near white, SSPC SP 10 or NACE #2, minimum 2.0 mil profile.</p> <p>Atmospheric service: Commercial SSPC SP 6 or NACE #3, minimum 2.0 mil profile.</p>
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Protecto-Line 100XT

PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

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
Coefficient of Expansion ASTM D-696	12-15x 10 ⁻⁶ , in./in./°F
Compressive Strength ASTM C-579	14,000PSI
Flame Spread ASTM D-635	10mm
Taber Abrasion, CS-17 Wheel 1000 cycles, 1000 gram load ASTM D-4060	20 mg. (AR)
Tensile Strength ASTM C-307	2,700 PSI
WVT ASTM E-96	0.0017 perm in.

MIXING & THINNING

Mixing

Add the correct amount of Part B to Part A and mix thoroughly for 1-2 minutes. Add 18-25 lbs. of G- 1 Filler to achieve a mortar-like consistency. The amount of G-1 Filler may vary due to working conditions and applications. Mix thoroughly until a homogenous blend is achieved.

Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

Ratio

Approximately 2:1 (A:B by volume)

Pot Life

70 Min @ 50°F
45 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.

Brush & Roller (General)

Immediately after the trowel application and before the topcoat has cured, dampen a natural bristle brush (thick bristle 4" wide) or roller with S-30 Smoothing Liquid. Lightly brush or roll the wet topcoat to remove trowel marks and pinholes. Never allow S-30 Smoothing Liquid to puddle on the topcoat.

Primer 67C must be roller applied. Use brush application for small touch-up or repair work only.

APPLICATION CONDITIONS

Condition	Material	Humidity
Minimum	50°F (10°C)	0%
Maximum	110°F (43°C)	90%

Substrate temperature must be 5°F above the Dew Point.

CURING SCHEDULE

Surface Temp.	Chemical Service
50°F (10°C)	96 Hours
75°F (24°C)	48 Hours
90°F (32°C)	24 Hours

CLEANUP & SAFETY

Cleanup | Use S-10 Cleaning Solvent 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: 0.68 Gallons (in a 3.5 gal plastic pail)
 Part B: 0.32 Gallons (in a 3.5 gal plastic pail)
5 Gallon Kits:
 Part A: 3.4 Gallons (in a 5 gal plastic pail)
 Part B: 1.6 Gallons (in a 3.5 gal plastic pail)

Shelf Life | Part A: 12 months
 Part B: 12 months

Storage | All Dudick products classified by DOT with 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: 14.3 lbs
 5 gallon kits: 52 lbs

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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.