

SELECTION & SPECIFICATION DATA

Generic Type	Trowel-Applied Novolac Epoxy Topping and Resurfacer Base Coat & Grout Coat
Description	A heavy-duty novolac epoxy mortar system used for high-impact protection and slope to drain in chemical processing areas.
Features	<ul style="list-style-type: none"> • Low Odor • VOC Compliant • Can be used for Coving, Pitch and Curb Construction • 100% Solids
Typical Uses	<ul style="list-style-type: none"> • Pulp and Paper Mills • Dike Areas • Chemical Storage • Pickling Room Floors • Truck Unloading Platforms • Warehouse Floors • Aisleways • 98% Sulfuric Acid Secondary Containment
Color	0766 Medium Grey, F748 Dark Grey, Q900 Black, & Q500 Brick Red
Primer	Concrete must be primed to aid in the “wetting out” required for good bonding. Use Primer 67 series or other primer recommended by technical service.
Recommended Thickness	3/16" (4.8mm)
Solids Content	By Volume 100%
Coverage Rate	<p>1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns) 9 ft²/gal at 3/16" (0.2 m²/l at 4.8 mm) Allow for loss in mixing and application.</p> <p>For a 1/8" nominal floor: 33 ft² per bag of EA-1 Filler with mixed resin @ 3/16" or 188 mils (4.8 mm) 130 ft² per 10.5 gal kit @ 3/16" or 188 mils (4.8 mm)</p> <p>— For a 3/16" nominal floor: 25 ft² per bag of EA-1 Filler with mixed resin @ 1/4" or 250 mils (6.3 mm) 100 ft² per 10.5 gal kit @ 1/4" or 250 mils (6.3 mm)</p> <p>— For a 1/4" nominal floor: 18 ft² per bag of EA-1 Filler with mixed resin @ 5/16" or 313 mils (7.9 mm) 70 ft² per 10.5 gal kit @ 5/16" or 313 mils (7.9 mm)</p>
Dry Temp. Resistance	Continuous: 150°F (66°C) Non-Continuous: 200°F (93°C)

Protecto-Crete 140T

PRODUCT DATA SHEET



SELECTION & SPECIFICATION DATA

- Chemical Resistance**
- Salts
 - Dilute Inorganic Acids
 - Oils
 - Sulfuric Acid 98%
 - Alkaline Solutions
 - Solvents

SUBSTRATES & SURFACE PREPARATION

- Concrete**
- Concrete must be prepared mechanically to remove surface laitance. Oils, grease and 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 or greater from the International Concrete Repair Institute with exposed pea gravel. The prepared surface should have a nominal tensile strength of 250 PSI per ASTM D7243.
- All concrete substrates must be checked for moisture prior to primer application using the Plastic Sheet Test per ASTM D4263.
- Additional surface preparation will be required if a 40-60 grit texture with exposed pea gravel is not achieved and the surface laitance not completely removed with the first mechanical preparation procedure.

PERFORMANCE DATA

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

Test Method	Results
Compressive Strength (ASTM C579)	5,000-6,000 PSI (34.5-41.4 MPa)
Flexural Strength (ASTM C580)	2,200-2,400 PSI (15.1-16.5 MPa)
Taber Abrasion* (ASTM D4060)	60 mg
Tensile Bond Strength (ASTM D7234)	Cohesive Failure of Concrete
Tensile Strength (ASTM C307)	1,500-1,600 PSI (10.3-11 MPa)

*CS-17 Wheel, 1,000 Revolutions

MIXING & THINNING

- Mixing**
- Protecto-Crete 140T BC should be mixed in a concrete mixer. The liquids must be thoroughly blended before adding the aggregate. Mechanically premix premeasured Part A & B thoroughly for 1-2 minutes before adding to mixer.
- Gradually add four (4) bags of EA-1 aggregate and mix 2-3 minutes or until a uniform consistency is achieved. For the first batch, use only 3 1/2 bags to allow the mixer to wet-out.
- Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.**
- Ratio** | 2.2:1 (A:B by volume)
- Pot Life** | 50-60 minutes @ 50°F (10°C)
20-30 minutes @ 75°F (24°C)
10-15 minutes @ 90°F (32°C)

APPLICATION PROCEDURES

Application

Hand trowel applications: Pour the mixed Protecto-Crete 140T BC into a wheelbarrow and transport to each work area. Dump directly onto the primed concrete for hand trowel applications. Use a wooden straight edge to initially distribute the material, and finish tightly using steel trowels.

Power trowel applications: the mix should be spread with a screed box to evenly distribute the material in rows. It is preferred to screed out over wet primer. For optimum results, finish the topping with a 48 - 52 inch power trowel within 10-20 minutes of placement. Over-trowelling can lead to blistering and excessive burnishing. Final finishing using a hover trowel (if available) can achieve an extremely smooth and tightly closed surface. Workmen must wear spiked shoes to avoid depressions while power-trowelling. The power and hand trowel blades should be cleaned periodically to remove resin buildup.

To terminate work, square cut the topping and start the next work period butting to this edge. Permanent terminating edges should be beveled into saw cuts in the concrete. Always use appropriate lighting to detect "chatter" marks and trowel mark defects. Allow the product to cure overnight at 75°F (23°C). Hand or power sand to remove tool marks and debris.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	50°F (10°C)	50°F (10°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.

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.

CURING SCHEDULE

Surface Temp.	Cure Time
50°F (10°C)	72 Hours
75°F (24°C)	24 Hours
90°F (32°C)	20 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 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.

Protecto-Crete 140T

PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Packaging	11.7 Gallon Kit (BC): Part A: 1.85 Gallons (in a 3.5 gal plastic pail) Part B: 0.85 Gallons (in a 3.5 gal plastic pail) Aggregate: 4 x 50 lb (23 kg) bags EA-1 Filler Yields 11.7 mixed gallons
	2.7 Gallon Kit(GC): Part A: 1.85 Gallons (in a 3.5 gal plastic pail) Part B: 0.85 Gallons (in a 3.5 gal plastic pail) Yields 2.7 mixed gallons
Shelf Life	Part A and Part B: 12 months EA-1 Aggregate: 36 months
	When stored in their original, unopened containers at 50°F-75°F (10°C-24°C). Storage in direct sunlight or excessive heat will reduce working time and shelf life.
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)	12 gallon kit: 230.9 lbs (104.7 kg)

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.