

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Flexibilized epoxy base coat and saturant resin
<b>Description</b>	A flexibilized epoxy resin that, when mixed with silica filler, will reduce the coefficient of expansion and provide a thixotropic base on which to embed fabric reinforcement. The added flexibility provides strength when bridging small surface cracks and increases resistance to thermal shock.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Bridges surface cracks up to 100 mils in concrete</li> <li>• Flexibilized system</li> <li>• Can be broadcast into for increased abrasion resistance and anti-slip properties</li> <li>• Chemical Resistant</li> <li>• Water Resistant</li> <li>• Meets all stringent VOC requirements</li> </ul>
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>• Thickener Tanks</li> <li>• Clarifiers</li> <li>• Waste Treatment Tanks</li> <li>• Secondary Containment</li> </ul>
<b>Color</b>	Clear resin. Once the G-1 Filler is added it will result in an unmatched gray color.
<b>Primer</b>	Primer 67, Primer 67LV, Primer 67DPLV, & Primer 67DTO
<b>Service Temperature</b>	Dependent on topcoat selection. Contact a Dudick representative for full chemical resistance capabilities
<b>Dry Film Thickness</b>	60 mils (1524 microns) per coat  <b>For estimating purposes 25-30sq. ft. per gallon of resin and 0.5 lbs per square foot of G-1 Filler will provide coverage for the combined trowelable basecoat and saturant layers.</b> It is common practice to increase the area to be coated 10% in order to account for waste and fiberglass mat overlaps.
<b>Solid(s) Content</b>	By Volume: 93%
<b>VOC Value(s)</b>	88 g/L
<b>Topcoats</b>	Topcoat selection will depend on exposure  Contact a Dudick representative for topcoat recommendation
<b>Application</b>	Mix well and apply a 1/16" (60mils) thick basecoat to a smooth, even finish using a trowel.

## SUBSTRATES & SURFACE PREPARATION

<b>Concrete</b>	<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 5 or greater from the International Concrete Repair Institute (ICRI) with pea gravel exposed. The prepared surface shall have a nominal 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>
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# Protecto-Flex BC

## PRODUCT DATA SHEET



### SUBSTRATES & SURFACE PREPARATION

<b>Metal</b>	Abrasive blast to a white metal finish according to SSPS SP5/NACE No. 1 and a 3.0 mil minimum profile.
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### PERFORMANCE DATA (TYPICAL VALUES)

Test Method	Results
Compressive Strength ASTM C-579	6,000 PSI (41.4 MPa)
Tensile Bond Strength ASTM D-7234	Cohesive Failure of Concrete
Tensile Elongation ASTM C-307	12-15%
Tensile Strength ASTM C-307	4,500-5,000 PSI (31-34.5 MPa)

### MIXING & THINNING

<b>Mixing</b>	Pour equal parts by volume (1:1) of Part B into Part A and mix thoroughly. Mix in 20-30 lbs. (9-13.6 kg) of G-1 Filler per mixed gallon to achieve a trowelable consistency. The amount of G-1 Filler may vary due to working conditions and applications. Mix thoroughly until a homogenous blend is achieved. This will yield approximately 2 gallons of mixed material.
<b>Ratio</b>	1:1
<b>Pot Life</b>	90 minutes @ 50°F (10°C) 60 minutes @ 75°F (24°C) 30 minutes @ 90°F (32°C)  To prevent material waste, do not mix more than can be used according to the corresponding time frames. Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

### APPLICATION PROCEDURES

<b>Application</b>	<p>After mixing the Part A, Part B, and G-1 Filler per the mixing instructions, apply approximately 1/16" (~60 mils) thick basecoat to a smooth, even finish using a trowel.</p> <p><b>Adding reinforcement and saturant:</b></p> <p>Before the basecoat begins to cure, press one layer of 1 ounce chopped strand fiberglass mat into the wet basecoat. Overlap all edges by 1 inch. Use a stiff, natural bristle brush or short nap roller and press the mat firmly into the basecoat, using a technique similar to hanging wallpaper, to remove all air pockets and wrinkles.</p> <p>Saturate the fiberglass by mixing Part A and B only, do not add the G-1 filler, to make a neat resin mixture. Using a short nap roller, roll vigorously until the mat has lost its white color and turns translucent, paying special attention to overlaps and corners. Use enough resin to wet out the mat, but do not allow the saturant to puddle. Roll the wet fiberglass with a ribbed roller to remove any trapped air or wrinkles. Allow the basecoat and reinforcement application to dry overnight.</p> <p>Before applying the topcoat, examine the fiberglass for any air bubbles or blisters. If these are present, they must be cut out and repaired, using the procedure above. Rough overlaps and protruding fiberglass strands must be abraded and smoothed. The topcoat will emphasize any imperfections in the fiberglass. Excessive blistering of the basecoat reinforcement may indicate inadequate rolling or too little saturant. <b>Prior to the the application of any further coats, the troweled basecoat, 1oz glass mat, and saturant layers must be allowed to dry enough that they can be ground dry enough to create dust to provide profile for successive coats and remove any high spots or protrusions on the entire surface then it must solvent wiped. Use caution not to grind through the reinforcing layer.</b></p>
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### 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.

### CURING SCHEDULE

Surface Temp.	Minimum Recoat Time	Maximum Recoat Time	Cure Time
50°F (10°C)	16 Hours	5 Days	4 Days
75°F (24°C)	8 Hours	3 Days	2 Days
90°F (32°C)	6 Hours	2 Days	24 Hours

If these recoat times are exceeded, consult a Dudick representative. Abrading 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 outgassing of air in the concrete and high substrate temperatures. Double priming, shading, or evening application may be required. Consult a Dudick representative.

### CLEANUP & SAFETY

**Cleanup** | Use S-10 Cleaning Solvent or Carboline Thinner 2 to clean tools and equipment.

**Safety** | Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal safety precautions. Use adequate ventilation. 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 Kit**  
 Protecto-Flex BC Part A - 0.5 gal (1.89 liters)  
 Protecto-Flex BC Part B - 0.5 gal (1.89 liters)

**5-Gallon Kit**  
 Protecto-Flex BC Part A - 5 gal (18.93 liters)  
 Protecto-Flex BC Part B - 5 gal (18.93 liters)

**Filler and Mat(Ordered Separately)**  
 G-1 Filler - 50lb bag (22.68 kg)  
 1oz Chopped Mat (100sf roll) - 11.6 lbs (5.2 kg)  
 1oz Chopped Mat (500sf roll) - 36.6 (16.6 kg)  
 1oz Chopped Mat (1000sf roll) - 68.5 lbs (31 kg)  
 1oz Chopped Mat (1800sf roll) - 118 lbs (53.5 kg)

# Protecto-Flex BC

## PRODUCT DATA SHEET



### PACKAGING, HANDLING & STORAGE

<b>Shelf Life</b>	Part A: 12 months Part B: 12 months
	When stored in their original, unopened containers. Storage in direct sunlight or excessive heat will reduce working time and shelf life.
<b>Storage</b>	Store all products in a cool, dry area away from open flames, sparks or other hazards.
<b>Shipping Weight (Approximate)</b>	1-gal Kit - Approx. 8.6 lbs (3.9 kg)
	5-gal Kit - Approx. 48.5 lbs (22.38 kg)
	G-1 Filler - Approx. 50 lbs (22.68 kg)
	1oz Chopped Mat (100sf roll) - Approx. 11.6 lbs (5.2 kg)
	1oz Chopped Mat (500sf roll) - Approx. 36.6 lbs (16.6 kg)
	1oz Chopped Mat (1000sf roll) - Approx. 68.5 lbs (31 kg)
	1oz Chopped Mat (1800sf roll) - Approx. 118 lbs (53.5 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 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.