Dudick inc.

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PROTECTO-COAT 100XT

FLAKE FILLED, HIGH PERFORMANCE, 100% SOLIDS, NOVOLAC EPOXY COATING, LOW ODOR, ENVIRONMENTALLY SAFE, 30-40 MILS (1 mm)

FEATURES

Meets all VOC Requirements
Can Saturate 1 Ounce Fiberglass Mat
Can be filled with **EA-1 Aggregate** and Troweled at 1/4".
Can be seeded with Sand or Aluminum Oxide for Anti-Skid.

RECOMMENDED APPLICATIONS

Secondary Containment
Structural Steel
Floors (Spillage)
Storage Tanks
Pump Housings

CHEMICAL RESISTANCE

Inorganic Acids
Alkali Solutions
Salts
Sulfuric Acid (98%)
Oils
Solvents

TEMPERATURE LIMITS (METAL APPLICATIONS)

Immersion up to 130ºF
Dry - 250ºF - Continuous
300ºF - Intermittent

COLORS: Color Chart information is available upon request.

Not available in bright white.

PHYSICAL PROPERTIES

Compressive Strength ASTM C-579	9,000 – 9,500 PSI
Tensile Strength ASTM C-307	3,000 – 3,500 PSI
Flexural Strength ASTM C-580	5,000 – 5,200 PSI
Shore D Hardness ASTM D-2240	80 – 85
Taber Abrasion ASTM D-4060	50 mg.
Flame Spread ASTM D-635	<5 mm
VOC ASTM D-3960	<50 g/l
WVT ASTM E-96	0.0018 perm. in.

SPECIFICATIONS

Protecto-Coat 100XT shall be a 30-40 mils thick, 100% solids, flake-filled, high functionality, novolac epoxy coating consisting of a basecoat and topcoat of 15-20 mils each, as manufactured by Dudick, Inc. Materials shall be applied in accordance with manufacturer's recommended practices.

THE PROTECTO-COAT 100XT SYSTEM

Protecto-Coat 100XT uses a moisture-tolerant primer and two coats of low temperature cure, flake-filled novolac epoxy resin to protect concrete and metal substrates.

Primer 67 is designed to prevent abrasive-blasted steel from developing rust bloom prior to the application of the **Protecto-Coat 100XT**. 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.

Primer 67C is designed for applications on concrete where spark testing is required or specified.
Basecoat/Topcoat: The novolac epoxy binder and overlapping flake fillers in **Protecto-Coat 100XT** provide the low permeability, high film integrity, and excellent chemical resistance required for prolonged substrate protection.

ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL

APPROXIMATE SQUARE FEET PER GALLON		
	CONCRETE	**STEEL**
PRIMER 67	150-200 ft.²	250-300 ft.²
PRIMER 67C	100-150 ft.²	----------
Protecto-Coat 100XT		
Actual 30-40 MIL DFT	38-40	38-40 ft.²
Theoretical 30-40 MIL DFT	45 ft.²	45 ft.²
S-10 Solvent	500	500 ft.²

**Quantities shown are for estimating purposes only. Actual field usage may vary.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Metal*:* Metal surfaces must be abrasive blasted to an appropriate finish.

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**. The prepared surface should have a nominal tensile strength of 250 PSI per ASTM D-7243.

All concrete substrates must be checked for moisture prior to product application using the Plastic Sheet Test, ASTM D-4263.

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.

Mechanical preparation removes laitance, exposing honeycombs or voids beneath the surface, which must be filled with **Scratch Coat 300**. (Refer to separate product bulletin.)

APPLICATION SPECIFICATIONS

Substrate temperature for both concrete and metal must be between 50ºF and 110ºF.

Relative humidity must not exceed 90%.

Substrate temperature must be 5ºF above the Dew Point.

PRIMER 67/67C MIX RATIOS (BY VOLUME)

Primer 67	Component A	1 gallon
Primer 67	Component B	1 gallon
Primer 67C	Component A	1 gallon
Primer 67C	Component B	29 fl. oz.

Important: Primer 67C Component A must be mechanically mixed for 1-2 minutes prior to adding the correct amount of **Component B**.

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

PRIMER 67/67C POT LIFE

TEMPERATURE	PRIMER 67 POT LIFE	PRIMER 67C POT LIFE
50°F	90 min.	110 min.
75°F	60 min.	90 min.
90°F	30 min.	50 min.

PRIMING

The following Primers are compatible with **Protecto-Coat 100XT:** Primer 67, Primer 67LV, Primer 67DPLV, Primer 67DTO & Primer 60.

PROTECTO-COAT 100XT MIX RATIO (BY VOLUME)

Component A	1 gallon
Component B	52fl. oz.

BASECOAT/TOPCOAT

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Pot life of the mixed **Protecto-Coat 100XT** will depend on the temperature. To prevent material waste and avoid

damage to equipment, do not mix more material than can be used according to the following table:

TEMPERATURE	POT LIFE
50ºF	65 min.
75ºF	40 min.
90ºF	20 min.

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

It is recommended that Component A be mixed for 1-2 minutes prior to adding Component B

Add the correct amount of **Component B** to **Protecto-Coat 100XT Component A** 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.

Allow the basecoat to cure until firm or slightly tacky before applying the topcoat.

SPRAY SPECIFICATIONS

Airless spray is recommended. Use a 30:1 pump equipped with a 60-mesh filter or larger. A Binks airless spray gun with a Reverse-A-Clean Tip is recommended. The nozzle should be tungsten carbide with a 0.017 - 0.035-inch diameter opening and a 25° to 60° fan. Suggested output pressure (depending on temperature) is 3,000 PSI minimum.

Brush or roller application may require additional coats to meet the specified dry film thickness.

CURE CYCLE

TEMPERATURE	RECOAT TIME MIN.	MAX.	CURE TIME
50ºF	14-16 hrs.	120 hrs.	96 hrs.
75ºF	8-10hrs.	72 hrs.	36 hrs.
90ºF	5-7 hrs.	48 hrs.	24 hrs.

If these recoat times are exceeded, consult a Dudick representative; sanding or abrasive blasting may be required before the next coat. Recoat times are dramatically reduced when the coating is exposed to direct sunlight.

Application of **Protecto-Coat 100XT** 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.

TESTING

If spark testing is required, use a DC spark/holiday tester set to the appropriate voltage to achieve a minimum 100 volts per mil of applied coating. An AC tester can be used, but is not as effective as a DC tester. Mark and repair all pinholes using **Protecto-Coat 100XT.** Retest only the repairs.

CLEANING

Use **S-10 Cleaning Solvent** to clean tools and equipment.

SHIPPING

Refer to Material Safety Data Sheets.

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.

When stored in their original, unopened containers, at 50°F-75°F the following shelf life periods will apply: **Primer 67** and **Protecto-Coat 100XT** components will have a six-month shelf life. **Primer 67C** components will have a thirty-day shelf life. Storage in direct sunlight or excessive heat will reduce working time and shelf life.

SAFETY

M.S.D.S: Material Safety Data Sheets must always be read before using products. Protecto-Coat 100XT systems are intended for application by experienced, professional personnel. Dudick, Inc. can supply supervision to help determine that the surface has been properly prepared, the ingredients correctly mixed, and the materials properly and safely applied.

If **Protecto-Coat 100XT** materials are to be applied by your own personnel or by a third party contractor, please be sure that they are aware of the following safety precautions:

- Exposure to resins and hardeners through direct skin contact and/or inhalation may cause severe dermatitis reactions in some people. Cleanliness of the skin and clothing is critical and must be of paramount concern.

- Fumes are heavier than air. Proper ventilation should be maintained to minimize breathing of concentrated fumes.

- Suitable respirators should be used during application.

- Safety glasses, gloves, and suitable protective clothing must be worn at all times during application.

- If contact with hardeners occurs, remove an clothing involved and flush the skin with flowing water. Discard the clothing. Do not attempt to wash and reuse it. **Protecto-Coat 100XT** liquid can be removed with **S-10 Cleaning Solvent**, MEK, or lacquer thinner.

- Keep open flames and sparks away from the area where materials are being mixed and applied.

- If a rash occurs, remove the individual from the work area and seek a physician's care for dermatitis.

- In case of eye contact, flush with water for at least 15 minutes and consult a physician.

- If swallowed, do not induce vomiting; call a physician immediately.

NOTE: Dudick, Inc. ("Dudick") warrants all goods of its manufacture to be as represented in its catalogs and that the manufacture of its products by its employees or sub-contractors shall be performed in a workmanlike manner. Dudick's sole obligation under this warranty shall be to replace any material which its examination shall disclose to be defective. Dudick makes no warranty concerning the suitability of its product for application to any surface, it being understood that the goods have been selected and the application ordered by the Purchaser. DUDICK, INC. MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THE GOODS SHALL BE MERCHANTABLE OR THAT THE GOODS ARE FIT FOR ANY PARTICULAR PURPOSE. THE WARRANTY OF REPAIR OR REPLACEMENT SET FORTH HEREIN IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES ARISING BY LAW OR OTHERWISE; AND DUDICK INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWN TIME, DAMAGES TO PROPERTY OF THE PURCHASER OR OTHER PERSONS, OR DAMAGES FOR WHICH THE PURCHASER MAY BE LIABLE TO OTHER PERSONS, WHETHER OR NOT OCCASIONED BY DUDICK'S NEGLIGENCE. This warranty shall not be extended, altered or varied except by written instrument signed by Dudick and Purchaser.

5/21/18