



Corporate Offices
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PRIMER 27/27C

VINYL ESTER PRIMER FOR STEEL AND CONCRETE 3-4 MILS (0.1 mm)

RECOMMENDED APPLICATIONS

Concrete Substrates
 Metal Substrates
 Primer for Polyester and Vinyl Ester Systems

PHYSICAL PROPERTIES

Tensile Strength 2,500 - 3,000 PSI
 ASTM C-307
 Tensile Elongation 5-6%
 ASTM C-307
 Adhesion to Concrete Stronger than
 ASTM D-7234 concrete
 Adhesion to Steel 2,200 - 2,500 PSI
 ASTM D-4541
 Electrical Properties <25,000 ohms
 NFPA #99
 ASTM F- 150

SPECIFICATIONS

Primer 27 shall be a 3-4 mils thick, vinyl ester resin cured with a peroxide catalyst as manufactured by Dudick, Inc. **Primer 27** shall be brush, roller or spray applied in accordance with manufacturer’s recommended practices. **Primer 27C** must be applied by roller at 6-8 mils wft.

PRIMER 27

Primer 27 is designed to prevent abrasive blasted steel from developing rust bloom prior to the application of a Dudick system. For maximum performance all steel surfaces should

be primed, but primer may not be needed for mild, non-immersion service. Concrete, however, must always be primed to aid in the “wetting out” required for good bonding.

PRIMER 27C - CONDUCTIVE PRIMER

Primer 27C is a two-component conductive vinyl ester primer designed to be used over concrete whenever the coating or lining system must be spark tested for pinholes.

ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL

| APPROXIMATE SQUARE FEET PER GALLON | | |
|------------------------------------|--------------------------|--------------------------|
| | CONCRETE | STEEL |
| Primer 27 | 150-200 ft. ² | 250-300 ft. ² |
| Primer 27C | 100-150 ft. ² | ----- |

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

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Metal: Surfaces must be abrasive blasted to an appropriate finish;

Immersion and heavy spillage services: White Metal SSPC SP-5 or NACE # 1, 3.0 mil minimum profile.

Heavy, non-immersion service (i.e. fumes and spillage): Near white SSPC SP- 10 or NACE #2, 2.0 mil minimum profile.

Atmospheric service: Commercial SSPC SP-6 or NACE #3, 2.0 mil minimum profile.

Concrete: Refer to specific product bulletin where **Primer 27** is being used for concrete surface preparation requirements.

| HARDENER AMOUNT/GALLON RESIN | | | |
|------------------------------|----------------|-----------|------------|
| Hardener | Substrate Temp | Primer 27 | Primer 27C |
| PH-1 | 50°F | 4-5 oz. | 5-6 oz. |
| PH-1 | 75°F | 3-4 oz. | 4-5 oz. |
| PH-1 | 90°F | 2-3 oz. | 3-4 oz. |

APPLICATION SPECIFICATIONS

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

Relative humidity must not exceed 90%.

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

PRIMING

Metal: For maximum performance, prime all metal surfaces with **Primer 27**, mixed with appropriate amount of **PH-1 Hardener**. If the coating can be applied to the metal before rust bloom occurs, priming may not be necessary. Otherwise, mix **Primer 27** with the correct amount of **PH-1 Hardener** and apply at 3-4 mils WFT with a roller, spray or brush.

Concrete: Concrete surfaces must be primed using **Primer 27** or **Primer 27C** and the appropriate amount of **PH-1 Hardener**. Concrete surface must be visually dry and pass ASTM D4263 before application of primer. We

recommend the basecoats of subsequent Dudick, Inc. vinyl ester products be applied over tacky **Primer 27**. Do not allow the primer to puddle.

Primer 27C should be applied by roller, and allowed to cure tack-free before basecoat application.

Cure Cycle for Primer 27/27C:

| Minimum Temperature | Maximum Recoat Time | Minimum Recoat Time |
|---------------------|---------------------|---------------------|
| 50°F | 8 Days | 8 hrs. |
| 75°F | 5 Days | 3 hrs. |
| 90°F | 3 Days | 1-1/2 hrs. |

To optimize intercoat adhesion, we recommend application of the basecoat while the primer is tacky. If this is not possible, the above recoat times should be adhered to. Exposure of the primer to direct sunlight will considerably shorten the recoat times. If recommended recoat times are exceeded, consult a Dudick Representative; sanding or abrasive blasting may be required before the coating, lining or floor topping may be applied.

Pot life of the mixed **Primer 27/27C** 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:

PRIMER 27/ 27C POT LIFE

| TEMPERATURE | POT LIFE |
|-------------|----------|
| 50°F | 60 min |
| 75°F | 45 min. |
| 90°F | 30 min. |

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



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In order to prevent curing problems with styrenated products, air movement and/or ventilation must be maintained not only during application but also after application until the system has totally cured. This will prevent high concentration of styrene inhibiting/retarding the cure of the system.

CLEANING

Use **S-10 Cleaning Solvent** to clean tools and equipment. **DO NOT USE ACETONE.**

SHIPPING

Refer to Material Safety Data Sheets.

STORAGE

Warning: All Dudick products classified by DOT labels as either white, yellow or red labels, must not be mixed or stored together as an explosive reaction might occur. All products should be stored in a cool, dry area away from open flames, sparks or other hazards.

When properly stored in their original, unopened containers at 50°F-75°F, **Primer 27** will have a shelf life of three-months or less. At temperatures above 75°F, two-months or less. **Primer 27C** will have a thirty-day shelf life. **PH-1 Hardener** has a six-month shelf life at 50°F-75°F. Exposure to excessive heat may cause premature gelling, reduce working time and shelf life.

SAFETY

M.S.D.S: Material Safety Data Sheets must always be read before using products. **Primer 27/27C** is 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 **Primers 27/27C** 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 flammable and 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 any clothing involved and flush the skin with flowing water. Discard the clothing. Do not attempt to wash and reuse it. **Primer 27/27C** can be removed with S- 10 Cleaning Solvent, MEK, or lacquer thinner. **DO NOT USE ACETONE.**
- 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,

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12/30/14