

SELECTION & SPECIFICATION DATA

Generic Type	Vinyl Ester Primer
Description	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.
Dry Film Thickness	3 - 4 mils (76 - 102 microns) per coat Styrene, is a reactive solvent. Depending on environmental conditions and substrate porosity, the applied wet film thickness will not equal the dry film thickness.
Theoretical Coverage Rates	200-300 ft. ² /gal at 3-4 mils (18.5-27.9 m ² /gal at 75-100 microns) Quantities shown are for estimating purposes only. Actual field usage may vary.
Application	Concrete Substrates Metal Substrates Primer for Polyester and Vinyl Ester Systems

SUBSTRATES & SURFACE PREPARATION

Steel	Heavy, non-immersion service (i.e. fumes and spillage): Near white SSPC-SP 10/NACE No. 2, 2.0 mil (50 micron) minimum profile. Atmospheric service: Commercial SSPC-SP6/NACE No. 3, 2.0 mil (50 micron) minimum profile.
Concrete	Refer to System Information Sheet where Primer 27C is being used for concrete surface preparation requirements.
Metal	Surfaces must be abrasive blasted to an appropriate finish
Immersion Service	Immersion and heavy spillage services: White Metal SPC-SP 5/NACE No. 1, 3.0 mil (75 micron) minimum profile.

PERFORMANCE DATA (TYPICAL VALUES)

Test Method	Results
Adhesion to Concrete ASTM D-7234	Stronger than concrete
Adhesion to Steel ASTM D-4541	2,200 - 2,500 PSI (15.2-17.2 MPa)
Electrical Properties (NFPA #99) ASTM F-150	<25,000 ohms
Tensile Elongation ASTM C-307	5-6%
Tensile Strength ASTM C-307	2,500-3,000 PSI (17.2-20.7 MPa)

MIXING & THINNING

Mixing	<p>Hardener PH-1 Amount/Gallon Resin 4-5 oz (118-148 ml) of Primer 27C @ 50°F (10°C) 3-4 oz (89-118 ml) of Primer 27C @ 75°F (24°C) 2-3 oz (59-89 ml) of Primer 27C @ 90°F (32°C)</p> <p>Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.</p>
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Primer 27C

PRODUCT DATA SHEET



MIXING & THINNING

Pot Life	Pot life of the mixed Primer 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: 60 minutes @ 50°F (10°C) 45 minutes @ 75°F (24°C) 30 minutes @ 90°F (32°C)
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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.

General	Primer 27 shall be brush, roller or spray applied in accordance with manufacturer's recommended practices. 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.
Spray Application	Contact Dudick representative for recommendations for spray applications.

APPLICATION PROCEDURES

General	Metal: For maximum performance, prime all metal surfaces with Primer 27C, 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 27C with the correct amount of PH-1 Hardener and apply at 3-4 mils (75-100 microns) WFT with a roller, spray or brush. Concrete: Concrete surfaces must be primed using Primer 27C and the appropriate amount of PH-1 Hardener. Concrete surface must be visually dry and pass ASTM D4263 and be prepared according to SSPC-SP13/NACE No. 6 before application of primer. We recommend the basecoats of subsequent Dudick, Inc. vinyl ester products be applied over tacky Primer 27C. Do not allow the primer to puddle.
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APPLICATION CONDITIONS

Condition	Material	Humidity
Minimum	50°F (10°C)	0%
Maximum	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
50°F (10°C)	8 Hours	8 Days
75°F (24°C)	3 Hours	5 Days
90°F (32°C)	1.5 Hours	3 Days

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.

TESTING / CERTIFICATION / LISTING

General	Dudick flooring systems can be built to meet or exceed the requirements of Static or Dynamic Coefficient of Friction testing per installation to meet static coefficient of friction requirements for ANSI B101.1 of >0.6 and dynamic coefficient of friction (DCOF)* – Wet ANSI A326.3 of >0.42.
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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.

PACKAGING, HANDLING & STORAGE

Shelf Life	When properly stored in their original, unopened containers at 50°F-75°F (10°C-24°C), Primer 27C will have a shelf life of six-months or less. At temperatures above 75°F (24°C), two-months or less. PH-1 Hardener has a six-month shelf life at 50°F-75°F (10-24°C). Exposure to excessive heat may cause premature gelling, reduce working time and shelf life.
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.
Shipping Weight (Approximate)	Refer to Material Safety Data Sheets.

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.