

DUDICK, INC.

Corporate Offices 1818 Miller Parkway Streetsboro, OH 44241 330-562-1970 800-322-1970 330-562-7638 FAX www.dudick.com

STERI-SEAL LE LOW EMISSION RESINOUS FLOORING AND HIGH PERFORMANCE SPECIAL COATING 100% SOLIDS, MULTI-FUNCTIONAL EPOXY FLOOR TOPPING

FEATURES

Meets California Department of Public Health CDPH/EHLB Standard Method Version 1.2 2017

Compliance Certificates Available Upon Request

Meets all VOC Requirements

Low Odor/Solvent Free Compliant

USDA Compliant

Stain Resistant with Good Cleanability

Can be Aggregate Filled and Troweled at 1/4" using **EA-1 Filler** for Heavy Traffic

Can Broadcast With Aggregate for Anti-Skid Surface

Can Saturate Fiberglass Reinforcement for Better Crack Bridging Properties

RECOMMENDED APPLICATIONS

Food Processing Floors Laboratories Pharmaceutical Plants Research Facilities Educational Facilities

CHEMICAL RESISTANCE

Dilute Inorganic Acids Mineral Oils
Dilute Alkali Solutions Salt Solutions
Aliphatic Organic Solvents

COLORS: Standard Color Chart available upon request.

PHYSICAL PROPERTIES

	Steri-Seal LE	
Compressive Strength	6,000 PSI	
ASTM C-579		
Tensile Strength	2,200 PSI	
ASTM C-307		
Tensile Elongation	5 – 10%	
ASTM C-307		
Flexural Strength	1,800 PSI	
ASTM C-580		
Taber Abrasion	35 mg.	
ASTM D-4060		
Flame Spread Index	<40*	
Shore D Hardness	80 – 90	
ASTM D-2240		
VOC	0	
ASTM D-3960		
Tensile Bond Strength	Cohesion Failure of	
ASTM C-4541	Concrete	
Specular Gloss	Satin 75 – 95 @ 60°	
ASTM D-523	H. Gloss 90 – 100 @ 20°	
Fungus Resistance	No Growth	
U.S. Mil Std. 810E		

^{*}Depends on thickness

SPECIFICATIONS

Steri-Seal LE shall be 20 mils thick, semi-self-leveling, 100% solids epoxy floor topping. **Steri-Seal LE SF** shall be 1/16" - 1/8" thick, 100% solids seeded epoxy floor topping. Both products are manufactured by Dudick, Inc. and applied in accordance with the manufacturer's recommended practices.

THE STERI-SEAL LE SYSTEM

Steri-Seal LE uses a moisture-tolerant primer and a flexible semi-self-leveling epoxy topcoat to achieve a strongly bonded monolithic topping with moderate chemical resistance and good physical and mechanical properties.

Primer 67LV: The blasted or etched concrete surface must be primed to provide the "wetting out" required for good bonding, using **Primer 67LV. Steri-Seal LE** can be applied while the primer is still tacky. Do not allow the primer to puddle.

Topcoat: The semi-self-leveling **Steri-Seal LE** develops a cured strength 2-3 times that of the concrete base to which it is applied to provide exceptional durability and prolong the life of the substrate.

THE STERI-SEAL LE SF SYSTEM

Steri-Seal LE SF uses a moisture-tolerant primer, sand or aluminum oxide broadcast and epoxy resin to achieve a strongly bonded monolithic topping with moderate chemical resistance and good physical and mechanical properties.

Primer 67LV: The blasted or etched concrete surface must be primed to provide the "wetting out" required for good bonding, using **Primer 67LV. Steri-Seal LE SF** can be applied while the primer is still tacky. Do not allow the primer to puddle.

Basecoat: The sand or aluminum oxide filled **Steri-Seal LE SF** basecoat develops a cured strength 2-3 times that of the concrete base to which it is applied to provide exceptional durability and prolong the life of the substrate.

Broadcast: Sand or aluminum oxide is used for non-slip texture; aluminum oxide provides additional chemical and abrasion resistance. Either material is broadcasted to complete saturation, and the excess removed by sweeping.

Topcoat: If the broadcasted surface requires encapsulation, it can be sealed the with **Steri-Seal LE SF** resin system. This will help provide better cleanability.

ESTIMATING QUANTITIES AND ORDER BILL OF MATERIAL

APPROXIMATE SQUARE FEET PER GALLON		
	CONCRETE	
Primer 67LV	150-200 ft. ²	
Steri-Seal LE		
Topcoat @ 20 mils	80 ft.²	
S-10 Solvent	500 ft. ²	
EA-1 Filler	55-65 ft. ² / 200 lbs.	

APPROXIMATE SQUARE FEET PER GALLON			
	CONCRETE		
Primer 67LV	150-200 ft. ²		
Steri-Seal LE SF			
Basecoat @ 20 mils	80 ft. ²		
S-10 Solvent	500 ft. ²		
Aluminum Oxide	2-1/2 lbs./ft. ²		
20-40 Mesh Sand	1 1/2 lbs./ft. ²		
Topcoat @ 8-10 mils	140-170 ft. ²		

^{**}Quantities shown are for estimating purposes only.

Actual field usage may vary. Additional topcoat material may be needed to encapsulate aggregate depending on the size of the aggregate and desired texture.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Concrete: Concrete must be mechanically prepared 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 60-80 grit sandpaper or the visual standard, CSP-3 from the International Concrete Repair Institute. 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 a 60-80 grit texture 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

Temperature of concrete substrate must be between 50°F and 110°F.

Relative humidity must not exceed 90%.

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



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PRIMER 67LV MIX RATIO (BY VOLUME)

Primer 67 LV Component A 73 fl.oz. Primer 67LV Component B 55 fl.oz.

PRIMER 67LV POT LIFE

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

STERI-SEAL LE MIX RATIOS (BY VOLUME)

Component A 1 gallon Component B 41 fl. oz.

PRIMING

Primer 67LV is compatible with Steri-Seal LE

TOPCOAT

Prior to adding Component B, mix Steri-Seal LE Component A for 1-2 minutes to assure that any pigment or filler which may have settled is redispersed so that a uniform color is achieved. Combine the A and B Components and stir mechanically for approximately 2-3 minutes. Thoroughly scrape the sides and bottom of the container and re-mix for another 30 seconds to achieve a uniform color and consistency. Pour the Steri-Seal LE mix directly onto the primed concrete. The mix should be spread to a 20 mil thickness with a serrated squeegee, notched trowel or gauge rake. After spreading the material to the proper thickness, backroll or roll with a porcupine roller to level and deaerate.

To terminate work, use duct tape to set a straight edge and remove the tape when the topping becomes slightly tacky. Start the next work period butting into this area. Permanent terminating lines should be made into the sawcuts in the concrete.

POT LIFE AND CURE CYCLES

Steri-Seal LE			
Temperature	Pot Life	Cure Time	
50°F	50-60 min.	72 hrs.	
75°F	30-40 min.	24 hrs.	
90°F	20-30 min.	20 hrs.	

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

STERI-SEAL LE SF

STERI-SEAL LE SF MIX RATIO (BY VOLUME)

Component A 1 gallon Component B 41 fl. oz.

BASECOAT

Prior to adding Component B, mix Steri-Seal LE SF Component A for 1-2 minutes to assure that any pigment or filler which may have settled is redispersed so that a uniform color is achieved. Combine the A and B Components and stir mechanically for approximately 2-3 minutes. Thoroughly scrape the sides and bottom of the container and re-mix for another 30 seconds to achieve a uniform color and consistency. Pour the Steri-Seal LE SF mix directly onto the primed concrete.

The mix should be spread to a 20 mil thickness with a serrated squeegee, notched trowel or gauge rake. The gauge rake is preferred. After spreading the material to the proper thickness, roll with a porcupine roller to level and de-aerate. Broadcast 20-40 mesh sand or aluminum oxide into the wet basecoat to complete saturation. Once cured, remove excess with a broom. This will produce a 1/16" thick topping. If additional thickness is specified, repeat the above steps.

When a 1/8" thickness is required, it is recommended that the application be done in two successive layers. Using two "seed coats" assures greater uniformity in both thickness as well as aesthetic quality.

TOPCOAT

Prior to adding Component B, mix Steri-Seal LESF Component A for 1-2 minutes to assure that any pigment or filler which may have settled is re-dispersed so that a uniform color is achieved. Combine the A and B Components and stir mechanically for approximately 2-3 minutes. Thoroughly scrape the sides and bottom of the container and remix for another 30 seconds to achieve a uniform color and consistency. Apply by roller at 6-8 wet mils. If surface texture is too rough a second sealer coat can be applied.

Pot Life and Cure Cycles

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

Application of **Steri-Seal LE SF** 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.

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 may occur.

Store all products 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 **Primer 67LV**, **Steri-Seal LE/LE SF** will have a six-month 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. Steri-Seal LE/LE SF materials 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 **Steri-Seal LE/LE SF** 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 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. Steri-Seal LE/LE SF 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.

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 subcontractors 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 THE WARRANTY OF PARTICULAR PURPOSE. REPAIR OR REPLACEMENT SET FORTH HEREIN IS



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2/21/19