



SPECTRALOCK® 1 Pre-Mixed Grout

DS-36589-0621

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

SPECTRALOCK® 1 Pre-Mixed Grout

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

SPECTRALOCK 1 is a patent pending, pre-mixed, stain proof grout with epoxy performance offering superior strength, fastest cure time, and the ability to be submerged, all while meeting the standards of ANSI A118.3*.

*Meets or exceeds specific ANSI A118.3 Performance Criteria

Equipped with Microban Anti-Microbial Protection

Uses

- Ceramic tile, glass tile and stone
- Residential and commercial
- Interior and exterior
- Floors and walls
- Ideal for re-grouting applications
- Swimming pools, fountains and other wet area applications

Advantages

- Has the same performance as an epoxy grout (ANSI A118.3) product without the epoxy resins*
 - 10X stronger than traditional pre-mixed grout
 - Stain-proof^
 - Non-sag formula for walls and floors
 - Uniform color—no blotchiness or shading
 - Never needs sealing
 - Easy to maintain, cleanable to the original color
 - Tough, durable, and crack resistant
 - High fashion when combined with SPECTRALOCK Part D DAZZLE™ component
 - Can be used for grout joints from 1/16-3/8" (2mm-9mm)
 - Finished product equivalent to SPECTRALOCK® Pro Premium Epoxy Grout
- ^ Stainproof (residential installations only) to common household cleaners, liquids and other goods. Clean all spills immediately.
- *Meets or exceeds ANSI A118.3 specific test designation 5.6.

Suitable Substrates

Packaging

Unit Size	Weight
1 GAL (3.8L) PAIL	14.2 LB (6.4kg)

Pallet Quantity

- 1 GAL – 125 Units per pallet

Approximate Coverage

US/Metric	Joint Widths			
	1/16" (1.5 mm)	1/8" (3 mm)	1/4" (6 mm)	3/8" (9 mm)
Tile Dimension 1" x 1" x 1/4" (25 x 25 x 6 mm)	53 ft ² (5.4 m ²)	27 ft ² (2.8 m ²)	15 ft ² (1.5 m ²)	11 ft ² (1.1 m ²)
2" x 2" x 1/4" (50 x 50 x 6 mm)	104 ft ² (10.7 m ²)	53 ft ² (5.4 m ²)	27 ft ² (2.8 m ²)	19 ft ² (1.9 m ²)
3" x 6" x 5/16" (76 x 152 x 8 mm)	168 ft ² (16.4 m ²)	86 ft ² (8.4 m ²)	45 ft ² (4.5 m ²)	31 ft ² (3.1 m ²)
4 1/4" x 4 1/4" x 5/16" (106 x 106 x 8 mm)	176 ft ² (18 m ²)	89 ft ² (9 m ²)	45 ft ² (4.5 m ²)	30 ft ² (3.0 m ²)
4" x 24" x 3/8" (102 x 610 x 9 mm)	238 ft ² (24.9 m ²)	121 ft ² (12.6 m ²)	62 ft ² (6.5 m ²)	43 ft ² (4.5 m ²)
6" x 24" x 3/8" (152 x 610 x 9 mm)	332 ft ² (34.5 m ²)	168 ft ² (17.4 m ²)	86 ft ² (8.9 m ²)	58 ft ² (6.0 m ²)
12" x 24" x 3/8" (305 x 610 x 9 mm)	551 ft ² (57.3 m ²)	277 ft ² (28.8 m ²)	140 ft ² (14.6 m ²)	95 ft ² (9.8 m ²)
24" x 24" x 3/8" (610 x 610 x 9 mm)	822 ft ² (85.8 m ²)	412 ft ² (43.1 m ²)	206 ft ² (21.7 m ²)	138 ft ² (14.6 m ²)
12" x 36" x 3/8" (305 x 914 x 9 mm)	619 ft ² (64.5 m ²)	311 ft ² (32.4 m ²)	158 ft ² (16.4 m ²)	106 ft ² (11 m ²)

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for eighteen (18) months. Store between 40°F to 75°F (4° to 24°C). Material should be kept in a cool, dry location prior to application.

Limitations

- Not for use in areas subjected to harsh chemicals, or areas exposed to aggressive cleaning regimens (e.g. steam cleaning). Not for use on floor and base areas in veterinary clinics, kennels, or in applications exposed to high concentrations of food and mineral acids or areas exposed to high temperatures. For these areas LATICRETE recommends using grout that meets ANSI A118.5 such as SPECTRALOCK® 2000 IG.
- Wait at least 14 days before cleaning grout joints with harsh cleaning supplies, such as hard bristle brushes.
- Pre-mixed grouts for ceramic tile and stone are not a replacement for a waterproofing membrane. When a waterproofing membrane is required, use a

LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEMS).

- SPECTRALOCK 1 Pre-Mixed Grout should not be used on floors and bases in the food preparation or cleaning area of commercial kitchens.
- Stainproof to common household cleaners, liquids and other goods in residential installations only. Clean all spills immediately.
- Product should be stored between 40°-75°F (4°-24°C)

Cautions

Consult SDS for more safety information.

- DO NOT add water or any other material to the mixture, or re-temper with water. This will have an adverse effect on the product and void all warranties.
- Protect finished work from traffic for a minimum of 24 hours.
- SPECTRALOCK 1 Pre-Mixed Grout could irritate eyes and skin. Avoid contact with eyes and/or prolonged contact with skin.
- DO NOT ingest internally. See SDS for more information.
- Keep out of reach of children.
- Protect from freezing. Product is stable up to 3 freeze/thaw cycles.
- Not for use with SPECTRALOCK Part D DAZZLE™ Glow-In-The-Dark.
- Maximum stain protection is achieved in 14 days at 70°F (21°C). Protect from exposure to acids (such as mustard, salad dressing, etc.) and strong cleaners during this period. Protect grout from dirt, construction debris, and contamination for 14 days @ 70°F (21°C).
- Some soft polished marble or delicate glazed or glass tile might be scratched by SPECTRALOCK 1 Pre-Mixed Grout during installation. Apply a small test area to determine results before grouting entire installation.
- In steam rooms or submerged applications, allow SPECTRALOCK 1 Pre-Mixed Grout to cure for a minimum of 14 days at 70°F (21°C) days before use of area and filing with water. See TDS 192 for more information on these applications.
- SPECTRALOCK 1 Pre-Mixed Grout could affect the color of white or porous stones (such as White Carrara, Thassos White, Royal Danby etc.). Apply a small test area to determine results before grouting entire installation.
- For "mixed media" tile, test stones for compatibility and cleaning time. Some porous stone will need to be cleaned much quicker than less porous stones.
- Conduct a test area to determine compatibility with metal or steel tile.

4. TECHNICAL DATA





VOC/LEED Product Information

This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program For Chemical Emissions For Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment. Total VOC Content form is 0.09 lb/gal (11 g/l).

Applicable Standard

None (but meets or exceeds specific ANSI A118.3 Performance Criteria)

Physical Properties

Test/Test Method	Description	Results
ANSI A118.3 5.1	Water Cleanability	Pass
ANSI A118.3 5.2	Initial Set Service Strength	> 2 hours < 8 hours
ANSI A118.3 5.4	Vertical Joint Sag	Pass
ANSI A118.3 5.5	Quarry/Quarry Bond Strength	800 psi - 1100 psi (4 – 6.3 MPa) 28 Days
ANSI A118.3 5.6	Compressive Strength	3250 - 3600 psi (22.3 – 25 MPa) 14 Days
ANSI A118.3 5.7	Tensile Strength	800 - 900 psi (5.5 – 6.2 MPa) 14 Days
ANSI A118.3 5.8	Thermal Shock	550-800 psi (4-5.5 MPa)

*Meets or exceeds ANSI A118.3 specific test designation 5.6

Working Properties

Density —14.2 lbs/gal (1.7 g/cc)

Test Standard	Test Description	Temperature		
		50°F (10°C)	70° (21°C)	90°F (32°C)
W.I. 9.1.73	Tack Free Time	4 hrs.	1 - 2 hrs.	45 min.
W.I. 9.1.73	Ready for Light Foot Traffic	9 hrs.	6 hrs.	4 hrs.
W.I. 9.1.73	Ready for Heavy Foot Traffic	48 hrs.	24 hrs.	10 hrs.
W.I. 9.1.73	Dirt, Stain Resistance, Food Spills, Household Cleaners	21 days	14 days	10 days
W.I. 9.1.73	Full Cure	28 days	28 days	14 days

Chemical Resistance

Chemical Name	Splash Exposure (30 min)	Intermittent Exposure (24 hours)	Continuous Exposure (7 days)
20% Sulfuric acid	R	R	R
5% Lactic acid	R	R	NR
50% Tannic acid	R	R	NR
50% Tartaric acid	R	R	R
10% Oxalic acid	R	R	NR
5% Acetic acid	R	R	NR
5% Benzoic acid	R	R	NR
3% Formic acid	R	R	NR
5% Citric acid	R	R	NR
1% potassium Permanganate	R*	R*	NR
5% Sodium Hyperchlorite	R	R	NR
45% KOH	R	R	NR
Distilled water	R	R	R
Mineral Water	R	R	R
Sea Water	R	R	R
Methanol	R	R	NR
10% Ethanol	R	R	NR
96% Ethanol	R	R	NR
Isopropanol (Windex)	R	NR	NR
Mek	R	NR	NR
Methylene chloride	R	R	NR
Toluene	NR	NR	NR
Xylene	NR	NR	NR
20% Sulfuric acid	R	R	R
5% Lactic acid	R	R	NR
50% Tannic acid	R	R	NR

* Material will stain due to exposure to these items.

NR=Not Recommended.

R=Recommended. Chemical Resistance determined in accordance with ASTM C267-1982.

NOTESTOSPECIFIER: Use the constant exposure recommendations for intermittent exposure to reagents at temperatures above 90°F (32°C).

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

5. INSTALLATION

Surface Preparation

Before starting to grout, remove spacers and debris in grout joints and remove dust and dirt using a wet sponge. Do not leave water standing in joints. The use of a topical sealer or grout release applied to unglazed porcelain tile, abrasive, non-slip or rough textured tiles or porous tile or stone surfaces before grouting will facilitate cleaning. Note: when grouting in hot weather refer to TDS 176 Hot Weather Tiling and Grouting. Substrate temperature must be between 50°F (10°C) and 90°F (32°C). Prior to grouting, apply SPECTRALOCK 1 to a small area to ensure the product will not stain. Apply STONETECH® Grout Release or a suitable STONETECH sealer to the surface of the tile, if necessary.

Application

See Data Sheet 36589.5, How To Install SPECTRALOCK® 1 Pre-Mixed Grout, for detailed installation instructions. Please note that working time is affected by many variables including surface and room temperatures. Warmer climates, for example, will shorten curing & working time, while colder conditions will extend the cure time. Installation substrate temperature range should be between 50°F (10°C) -90°F (32°C). Do not add water or any other materials to the grout mixture. This will have an adverse effect on the product and void all warranties. Clean-up is critical. Prepare for the initial and final washes by having pails of clean water ready for the clean-up process.

NOTE: After surfaces are cleaned, allow to dry thoroughly before grouting.

- Spread grout using a sharp edged, firm rubber grout float. Work the grout diagonally across the joints, packing them full.
- “Cut” excess grout off the tile surface using the edge of the float held at a 90° angle like a squeegee, stroking diagonally to avoid pulling grout out of filled joints.

Cleaning

NOTE: Have clean water, new clean sponges, white nylon scrub or scouring pads and clean microfiber towels ready.

- Once grout has been spread, wait approximately 5-10 minutes before cleaning (or within an “arms-length” of what has been spread). Wait slightly longer at colder temperatures.
- Submerge clean sponge into water and wring until the sponge is moist but not dripping with water. Putting too much water on the grout joints could affect the cure time and appearance of grout joints.
- Change wash water every 50 ft² (4.6 m²).

- Wipe grout joints and tile surface in a light circular motion, loosening grout residue while keeping the joints smooth and full.
- Drag a clean sponge diagonally over the scrubbed surfaces to remove any remaining grout residue.
- For best results, we recommend to rinse sponge after every final pass; use each side of sponge only once between rinsing.
- Check work as you clean. If necessary, repair any low spots with additional grout.

WALL APPLICATIONS

Instead of a sponge, the use of a damp, well wrung, folded terry cloth towel can be helpful to remove excess grout while smoothing joints less than 1/8" (3 mm) on walls. Use light pressure when using folded terry cloth towel.

FINAL INSPECTION AND CLEANING

- Begin final cleaning when grout joints are hard to the touch, depending upon the size of the grout joint and the ambient temperature. Smaller grout joints (1/16" (1.6mm) or 1/8" (3.2mm)) would take less time to start to clean, approx. 45 min. For larger grout joints (3/8" (9.5 mm)) we recommend waiting about 1 hour to ensure the grout joints are hard and cannot be disturbed with the second cleaning.
- Use only clean water and simply dunk the white nylon scrub or scouring pad in the water and let all the water pour out – it should be nearly dry and then start to break up the grout haze left from the initial wash on the surface of the tiles.
- Rinse scrub pad frequently, letting all water escape before continuing to clean.
- Then, use a clean cloth to the scrubbed surfaces to remove any residue.
- Allow cleaned areas to dry and inspect tile/stone surface.
- If haze remains on the tiles the following day, it can be buffed off the using a nylon scrub pad.
- Make certain to check tile surface with adequate lighting after the tile surface is dry.
- Rinse with clean water and allow surface to dry. Inspect grout surface and repair as required with fresh grout.
- For ANY area that will later receive intermittent water exposure, allow area to cure a minimum of 24 hours at 70°F (21°C) & 50% RH.
- Protect finished surface from traffic for at least 24 hours at 70°F (21°C).
- Do not expose grout to acid cleaners for 14 days.
- Allow grout to cure for 14 days at 70°F (21°C) prior to use in submerged applications or steam rooms.

See LATICRETE Technical Data Sheet 192 for more information on grouting of ceramic tile in submerged installations.

For use with our SPECTRALOCK® Dazzle™ Please follow these instructions to use with any color in the SPECTRALOCK 1 Pre-Mixed Grout:

- Obtain a 1 gal (3.8 L) bucket of SPECTRALOCK 1 Pre-Mixed Grout and an empty 1 gal (3.8 L) bucket.
- With a margin trowel – take approx. 1/2 of the material within the SPECTRALOCK 1 Pre-Mixed Grout bucket and place within the empty bucket.
- Then in the center of each bucket create a small hole with a margin trowel.
- Open the Dazzle (any color) and proceed to place 1 jar of Dazzle within each bucket inside the small holes in the center of each bucket.
- Next, take a good scoop of SPECTRALOCK 1 Pre-Mixed Grout and cover the Dazzle in the hole very slowly and gently (this helps to mitigate the Dazzle from dispersing in the air and out of the bucket).
- Then proceed to mix by hand (It is not recommended using any drills to mix the SPECTRALOCK 1 Pre-Mixed Grout since that would help to incorporate more air in the mixture – potentially speed up the cure/setting process).
- Thoroughly mix the dazzle and disperse throughout the bucket.
- Once each bucket has been mixed extensively and the Dazzle seems to be dispersed evenly within each bucket – then add the other 1/2 gal (1.9 L) back into the original bucket.

Now you are ready to grout or reseal the original bucket to keep the SPECTRALOCK 1 from skimming over & curing.

NOTE: The use of dazzle in the mix will shorten the shelf life of the SPECTRALOCK 1.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one-and-a-half (1.5) years if stored at temperatures >40°F (4°C) and <75°F (24°C).

7. WARRANTY

See 10. FILING SYSTEM:

- DS 230.99: LATICRETE Lifetime System Warranty (United States and Canada)

8. MAINTENANCE

Wait at least 14 days before cleaning grout joints with harsh cleaning supplies, such as hard bristle brushes. Routine maintenance can be done with STONETECH® Stone & Tile Cleaner or any neutral pH cleaner. For tough or difficult to remove soil use STONETECH KlenzAll™ Cleaner, with a white nylon scouring pad or a long handled stiff bristle brush. For additional information please refer to the Grout Guide TDS 400.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235
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