

PERMACOLOR® Grout

DS-250-0625

Globally Proven Construction Solutions



1. PRODUCT NAME PERMACOLOR[®] Grout

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

PERMACOLOR[®] Grout has been upgraded with a new formula providing increased strength and enhanced stain resistance to hold up to the most demanding commercial and residential installations.

Advantages

- Featuring Water Dispersion Technology^(TM), making a more dense and stronger grout joint
- 20% increased strength providing a higher compressive and tensile strength, longer life and better resistance to wear and tear. (+)
- 30% enhanced stain resistance for less maintenance while staying true to its original color. (+)
- No Sealing Required
- Easier to spread and clean means faster installations with less labor and hassle.
- Improved color consistency.

- Exceeds ANSI A118.7, the highest cementitious grout standard ensuring durability and stain resistance. Conforms to ISO 13007 and EN 13888 (CG2WA).
- Equipped with Microban[®] an antimicrobial product protection to inhibit the growth of mold and mildew in the grout.*
- Fast setting
- Ideal for floors and walls (joint widths of 1/16–1/2" [1.5 to 12 mm])
- Component of LATICRETE[®] Lifetime System Warranty

(+): When compared to previous version of PERMACOLOR

LATICRETE 25 Year Warranty (DS 025.0 for USA / DS 025.0CN for Canada) and LATICRETE Lifetime Warranty (DS 230.99 for USA / DS230.99CN for Canada)

* Use a suitable and regular cleaning regimen to ensure that any organic materials which may accumulate are removed from the surface of the grout.

Suitable Substrates

Tile or Stone

Packaging

8 lb (3.6 kg) Bags 25 lb (11.3 kg) Bags

Shelf Life

Factory sealed bags of this product are guaranteed to be of first quality for two years (2) if stored in a cool, dry place.

Limitations

- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE Waterproofing Membrane (see Section 10 FILING SYSTEM).
- Use SPECTRALOCK[®] 2000 IG when chemical resistance is required.
- DO NOT use acid to clean colored grout joints.

- Job site conditions will affect the final color of colored grouts. Try a small test area to determine your results before grouting the entire installation.
- Certain types of tile are more absorbent than others and will trap color pigment during grouting. Prior to grouting, test for absorption of color pigment. Porous tiles will need to be sealed prior to grouting.
- Selecting other grouting materials: LATICRETE has grouting materials designed for every use. For installations that require high strength and chemical resistance choose SPECTRALOCK 2000 IG. This product is ideal for installations where a stain resistant colorfast grout is desired.Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length.
- For ANY area that will later receive intermittent water exposure, such as showers, allow area to cure a minimum of 48 hours at 70°F (21°C) & 50% RH.
- In submerged applications or steam rooms allow PERMACOLOR[®] to cure for 14 days at 70°F (21°C) prior to filling with water or exposing to steam. See TDS 192 and TDS 172 for more information on these applications.

Cautions

- Consult SDS for more safety information.
- Protect finished work from traffic until fully cured.
- Contains portland cement. Causes severe skin burns and serious eye damage. May cause an allergic skin reaction. Wear protective gloves, clothing and eyewear. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer, respiratory irritation or serious lung problems. Avoid breathing dust.
- Grout may scratch soft glazed glass tile or polished surfaces. Conduct a test area to verify results.

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.

Applicable Standard

- ANSI A118.6
- ANSI A118.7
- EN 13888
- ISO 13007

This product currently has a Product Specific (Type III) Environmental Product Declaration (EPD). The PCR review, life cycle assessment and declaration were independently verified by UL Environment in accordance with ISO 14025, ISO 14040 and ISO 14044.

Physical Properties

Tensile Strength (28 Days)	510 psi (3.5 MPa)
Compressive Strength (28 Days)	4750 psi (32.8 MPa)
Flexural Strength (28 Days)	1400 psi (9.65 MPa)
Linear Shrinkage (7 Days)	0.065%
Water Absorption (28 Days)	3.25%

Test	Test Method	ISO 13007-3 CG2WA Specification	Results
28 Day Cure Abrasion Resistance	ISO 13007-4 4.4	Less than or equal to 1,000 mm ³ (0.061 in ³)	121–132 mm ³ (0.0074– 0.0081 in ³)
28 Day Cure Flexural Strength	ISO 13007-4 4.1.3	Greater than 2.5 MPa (362 psi)	8.5–9.2 MPa (1226– 1340 psi)
6 Day 21 Day Water Soak 25 Freeze/Thaw Cycle Flexural Strength	ISO 13007-4 4.1.3	Greater than 2.5 MPa (362 psi)	3.31–3.79 MPa (480–550 psi)
28 Day Cure Compressive Strength	ISO 13007-4 4.1.4	Greater than 15 MPa (2175 psi)	35.7–36.8 MPa (5,176– 5,339 psi)
6 Day 21 Day Water Soak 25 Freeze/Thaw Cycle Compressive Strength	ISO 13007-4 4.1.4	Greater than 15 MPa (2175 psi)	30.4–31.2 MPa (4,408– 4,518 psi)
28 Day Cure Shrinkage	ISO 13007-4 4.3	Less than 3 mm/m (0.12 in./3.28 ft)	0.51–0.62 mm/m (0.02– 0.024 in/3.28 ft)
28 Day Water Absorption Soaked 30 Minutes	ISO 13007-4 4.2	Less than 2 g (0.0044 lb)	0.09–0.14 g (0.0002– 0.0003 lb)
28 Day Water Absorption Soaked 240 Minutes	ISO 13007-4 4.2	Less than 5 g (0.011 lb)	0.54–0.7 g (0.0012– 0.0015 lb)

Working Properties

Pot Life	45–60 min at 70°F (21°C)
Final Set	2 - 3 hrs
Heavy Foot Traffic	6 hrs

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.

Note: when grouting in hot weather refer to TDS 176 Hot Weather Tiling and Grouting. Substrate temper necessary. Refer to TDS 400 Grout Guide for more information on grouting.

Mixing

Use approximately 2 .4 to 2 .7 quarts (2.3 to 2 .5 L) of clean potable water for 25 lbs (11.3 kg) of PERMACOLOR Grout. Place water in a clean mixing container and add grout powder.

Mix with a slow speed drill mixer (300 rpm) for 1 minute. The mix may look slightly dry during this time, but DO NOT ADD MORE WATER. The Water Dispersion Technology(TM) will take effect and wet out the product over the next 5 minutes during slaking.

Wait the 5 minutes to slake and then remix with a drill for 1 minute.

Although it is not necessary, for an added level of stain fighting protection use STONETECH[®] GroutUp[™] Additive in lieu of water.

Application

Clean the tile surface with a damp sponge. Spread with a sharp, firm rubber grout float or wall float for narrow wall joints.

To remove excess grout hold the float at a 90° angle and pull it at a 45° angle diagonally across the joints to avoid pulling out the material.

Note: If the grout begins to stiffen during installation, remix with a margin trowel for 10–15 seconds. **DO NOT ADD MORE WATER.**

Cleaning

For first cleaning wait approximately 20 - 30 minutes at 70° F (21° C). Wider joints or cooler temperatures may extend wait time. Begin initial cleaning by lightly wiping down entire area to be cleaned with a damp sponge. Wash with a damp sponge (not wet). Work diagonally to the joints. Allow to dry 3 hours at 70° F (21° C).

For second cleaning use a damp sponge or dry cloth to remove remaining grout haze.

Note: Use caution when grouting soft glazed tile or polished stone.

If grout is to be sealed, LATICRETE generally recommends waiting a minimum of 48 hours at 70°F (21°C) prior to sealing PERMACOLOR Grout, or any other cement-based grout; however, we suggest deferring to the written recommendations of the sealer manufacturer to make the final determination, as certain sealers may require the cement grout to cure for an extended period of time.

6. AVAILABILITY AND COST

Availability

LATICRETE materials are available worldwide.

For Distributor Information, Call:

Toll Free: 1.800.243.4788 Telephone: +1.203.393.0010 For on-line distributor information, visit LATICRETE at <u>laticrete.com</u>

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

- 1 Year Product Warranty (US) (English)
- 5 Year System Warranty (US) (English)
- 10 Year System Warranty (US) (English)
- 25 Year System Warranty (US) (English)
- LATICRETE Lifetime System Warranty (US) (English)

8. MAINTENANCE

LATICRETE recommends using STONETECH[®] surface products to protect, clean and enhance stone, masonry, tile and grout surfaces. Protect surfaces from common stains by using a STONETECH sealer such as STONETECH BulletProof[®] Sealer. Routine maintenance should follow with STONETECH Revitalizer[®] Cleaner and Protector or a neutral pH cleaner such as STONETECH Stone & Tile Cleaners. For tough or difficult to remove soil use STONETECH KlenzAll[™] Cleaner, a nylon scrubbing pad or a long handled stiff bristle brush. For additional information, please refer to the Grout Guide, TDS 400 and TDS 113 Cement Grout Care & Maintenance for more information.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free:	1.800.243.4788, ext. 1235
Telephone:	+1.203.393.0010, ext. 1235
Fax:	+1.203.393.1948

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at <u>laticrete.com</u>.

10. FILING SYSTEM

Additional product information is available on our website at <u>laticrete.com</u>. The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS 230.05: LATICRETE 5 Year System Warranty (United States and Canada)
- DS 230.10: LATICRETE 10 Year System Warranty (United States and Canada)
- DS 230.15: LATICRETE 15 Year System Warranty for Steel or Wood Framed Exterior Facades (United States and Canada)
- DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)
- DS 230.99: LATICRETE Lifetime System Warranty
- DS 030.0: SPECTRALOCK[®] 2000 IG
- DS 236.0: 9235 Waterproofing Membrane
- DS 663.0: HYDRO BAN®
- TDS 192: Installation of Ceramic Tile in Swimming Pools
- TDS 176: Hot Weather Tiling and Grouting

United States Invention Patent No.: 6,784,229 (and other Patents)