



LATAPOXY® SP-100

LATAPOXY® SP-100 is a stainless, pigment free, colourfast epoxy grout for grouting ceramic and glass tile, brick, and stone. Cleans with water while fresh. Can be used for interior and exterior applications. Ideal for kitchen floors, counter tops, bathroom floors, malls, cafeterias, and laboratories. Can be used as a coloured epoxy adhesive.

Globally Proven Construction Solutions



Contractor: The Orchid Group
Location: Shield Street, Cairns



FEATURES/BENEFITS

- Water cleanable
- No flammable solvents are required to clean tools or finished work
- Non staining on white and light coloured marble
- High bond strength
- Maximum chemical resistance
- Stainless – will not be stained by most foods, beverages and cleaning agents
- Uniform colour – reduces colour shad variations
- Chemical resistant – 100% solids epoxy resists many acids, alkalis and corrosives
- Durable – will not peel, crack or powder
- Easy to maintenance – smooth texture, easier to clean than cementitious grout joints
- Easy to use – no noxious odour, non-flammable, water cleanable, easy to clean; even with textured tile

When used as an adhesive

- Ideal for installing moisture sensitive marble and agglomerated tiles
- Ideal for the installation of resin backed marble and agglomerates
- Ideal as a coloured epoxy adhesive for thin glass mosaic tile
- Bonds to many difficult substrates

SUITABLE SUBSTRATES*

- | | |
|--------------------------------------|--------------------------------------|
| ■ Exterior Glue Plywood [^] | ■ Cement Terrazzo |
| ■ Concrete/Masonry | ■ Cement Backer Boards ^{^^} |
| ■ Concrete Block | ■ Gypsum Wallboard [^] |
| ■ Cement Plaster | ■ Existing Ceramic Tile and Stone |
| ■ Cement Mortar Beds | ■ Polyester Pool Shells |
| ■ Stainless Steel | ■ Steel |

[^] Interior use only.

^{^^} Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

*Suitable substrates when used as a coloured adhesive.

USES

Commercial – cafeterias, laboratories, malls, rest rooms, swimming pools. Residential – kitchen floors, counter tops, bathrooms, foyers.

MANUFACTURER

LATICRETE Australia Pty Ltd
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Virginia, QLD 4014 Australia

Telephone: 07 3865 1599
Toll Free: 1800 331 012
Fax: 07 3865 2250
Internet: www.laticrete.com.au

Packaging

Complete unit consists of Resin and Hardener (Parts A & B), Filler Powder (Part C), cleaning pad, gloves and instruction booklet.

#4 Resin Unit: carton; 70 cartons per pallet:

- 4x Part A
- 4x Part B
- 4x Part C

Refer to the grout colour guide for available colours.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years.

Limitations

- Suitable for exterior applications. Light colours may darken slightly from direct UV exposure. Consult LATICRETE Technical Services for recommendations on exterior applications.
- For industrial applications exposed to high concentrations of food, mineral acids and high temperatures, use SPECTRALOCK® 2000 IG.
- When slab temperature is below 16 °C, it is recommended to use SPECTRALOCK 2000 IG for faster cure.
- Maximum stain resistance is achieved in 10 days at 21 °C. Protect from exposure to acids (such as vinegar, mustard, salad dressing) dirt and strong cleaners during this period.
- Some soft polished marble or delicate glazed tile may be scratched by LATAPOXY® SP-100 Part C Filler Powder during installation. Apply a small test area to determine results before grouting entire installation.
- **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, L/720 for ceramic tile/brick to external framed and sheeted substrates or L/720 for thin bed stone installations where L=span length.

Cautions

- During cold weather, protect finished work from traffic until fully cured.
- Until cured, LATAPOXY SP-100 may irritate eyes and skin. Avoid contact with eyes and or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

TECHNICAL DATA

Applicable Properties

Conforms to AS ISO 13007 and EN 13888 with RG Classification.

Test	Test Method	Results
Tensile Strength	ANSI 118.3-1999; E-5.7	11.7 MPa
Thermal Shock Resistance	ANSI 118.3-1999; E-5.8	8.3 MPa
Shrinkage	ANSI 118.3-1999; E-5.3	0.10%
Sag Resistance	ANSI 118.3-1999; E-5.4	Pass
Water Cleanability	ANSI 118.3-1999; E-5.1	80 minutes

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

Test	Test Method	ISO 13007-3 RG Specification	Results
28 day cure abrasion resistance	ISO 13007-4 4.4	less than or equal to 250mm ³	133–141 mm ³
28 day cure flexural strength	ISO 13007-4 4.1.3	Greater than 30 MPa	34.9–40.3 MPa
28 day cure compressive strength	ISO 13007-4 4.1.4	Greater than 45 MPa	62.4–64.0 MPa
28 day cure shrinkage	ISO 13007-4 4.3	Less than 1.5 mm/m	0.99–1.05 mm/m
28 day water absorption soaked 240 minutes	ISO 13007-4 4.2	less than 0.1 g	0 g

Performance Properties at 21°C

Working Time	1 hour
Foot Traffic	24 hours
Heavy Traffic	72 hours
Wet Density	1590 kg/m ³

Chemical Resistance Chart at 23°C

Chemical Name	Continuous Exposure	Intermittent Exposure	Splash Exposure
Milk	R	R	R
Wine	R	R	R
Ethanol	NR (soft)	R	R
Potassium Permanganate 10%	R	R	R
Potassium Permanganate 1%	R	R	R
Tannic Acid to 50%	R	R	R
Tartaric Acid to 50%	R	R	R
Phosphoric Acid to 80%	R	R	R
Sulfuric Acid to 20%	R	R	R
Oxalic Acid to 10%	R	R	R
Lactic Acid to 5%	R	R	R
Acetic Acid to 5%	R	R	R
Sodium Hydroxide to 50% Saturated	R	R	R
Benzoic Acid 5%	R	R	R
Sea Water	R	R	R
Fruit Juice	R	R	R
Methanol	NR	NR	R

Mek	NR	NR	R
Chloroform	NR	NR	R
Methylene Chloride	NR	NR	NR
Toluene	NR	NR	R
Xylene	NR	NR	R

* Chemical Resistance depends on exposure levels:

Splash — minor spill wiped up quickly such as in a laboratory

Intermittent — exposure to chemicals where clean up takes place several times a day such as in a commercial kitchen

Continuous — heavy exposure to chemicals where clean-up is less frequent such as in an industrial food plant

R=Recommended; NR=Not Recommended

Chemical Resistance determined in accordance with ASTM C267-1982

Note to Specifier: Use the constant exposure recommendations for intermittent exposure to reagents at temperatures above 32°C

** Long exposure may discolour Epoxy

INSTALLATIONS

5.1 As Epoxy Grout;

Note: Contact LATICRETE for free training, particularly where a trained LATAPOXY SP-100 grouter is a condition of warranty

Surface Preparation

Before starting to grout remove spacers and debris in grout joints. Remove dust and dirt using a damp sponge. Do not leave water standing in joints. Do not clean tiles with acid based cleaners. Substrate temperature must be between 16°C and 32°C. **Note:** Temperature will effect working properties of LATAPOXY SP-100. Warm temperatures will speed curing and shorten working time. Cool temperatures will slow curing and require longer time to traffic. Store LATAPOXY SP-100 at 21°C for 24 hours prior to use.

Mixing

Pour LATAPOXY® SP-100 Part A and Part B into a clean mixing pail and mix thoroughly by hand or with a slow speed mixer (300 RPM) until liquids are completely blended. Add LATAPOXY SP-100 Part C Filler Powder and mix until uniformly blended.

Application

Immediately pour entire contents of pail onto a flat surface (do not leave in pail). Spread with a sharp, firm rubber grout float. Work the grout paste into the joints until completely filled. Use diagonal strokes to pack the joints. Insure that joints is filled and grout is not just sitting on top (i.e. "bringing the joint").

Cleaning

Remove excess grout from the face of the tiles with the edge of the grout float. Hold the float at a 90° angle and pull it diagonally across the joints and tile to avoid pulling out the material. Apply water to the surface and clean with a white scub pad or sponge in a circular motion to break up the grout and dress the joints.

Initial Cleaning: Wait 15 to 20 minutes or within 1 hour of mixing to begin cleaning. Use white scubpads or sponges with plenty of water to break up film. Follow by cleaning off film with a wet sponge or wet towel.

Final Cleaning: Clean surface after 6-8 hours but within 24 hours of initial cleaning with neutral detergent, rinse with clean water.

Note: see TDS 1012 for further information

5.2 Coloured Epoxy Adhesives;

Surface Preparation

Before starting, clean areas to be covered. Remove dust and dirt using a damp sponge. Do not leave water standing in on surfaces to be treated, applications can be made on damp surfaces. Do not clean surfaces with acid based cleaners. Condition substrates, temperature must be 16°C and rising and not more than 32°C. Polyester or fiberglass surfaces should be sanded prior to the application of LATAPOXY SP-100. Lightly sand to clean and remove waxes and mold releases from surfaces. Metals should be brushed back to bright and coated with SP-100 liquids just prior to adhesive work in critical installations. Follow AS 3958 for requirements for movement joints or TCNA detail EJ-171 "Movement Joints — Vertical & Horizontal". Do not cover movement joints with adhesives.

Note: Temperature will effect working properties of LATAPOXY SP-100 Epoxy. Warm temperatures will speed curing and shorten working time. Cool temperatures will slow curing and require longer time to traffic. Store LATAPOXY SP-100 Epoxy at 21°C for 24 hours prior to use.

Mixing

Pour LATAPOXY SP-100 Part A and Part B into a clean mixing pail and mix thoroughly by hand or with a slow speed mixer (300 RPM) until liquids are completely blended and of one uniform colour. As required add part C powder till the desired consistency for trowelling is achieved. Take material out of the bucket in warm temperatures to prolong working time.

Application

Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional adhesive with the notched side. **Note:** Use the proper sized notched trowel to insure full bedding of the tile. Back butter large tiles to provide full bedding and firm support. Place tiles into wet, sticky adhesive and bed tile. Check adhesive for complete coverage by periodically removing a tile and inspecting bedding adhesive transfer onto back of tile.

Cleaning

Remove excess adhesive from the face of the tiles as the work progresses with a wet sponge.

5.3 Sand Seeding Application Instructions

Epoxy Coating

Apply a 250µm thick coat of SP-100, liquids only mix, and whilst still wet and tacky, broadcast into the coat, clean, dry river sand*, to refusal. Allow to dry and set, before vacuuming and removing any loose sand. After vacuuming, the SP-100 epoxy should be barely visible and with the sand partly embedded but exposed and free of epoxy.

Epoxy Adhesive

Apply a 500 - 1000µm thick coat of SP-100 Adhesive, and whilst still wet and tacky, broadcast into the coat, clean, dry river sand*, to refusal. Allow to dry and set, before vacuuming and removing any loose sand. After vacuuming, the SP-100 adhesive should be barely visible and with the sand partly embedded but exposed and free of epoxy.

* Silica sand that has been washed, classified, screened and kiln dried with a particle size graded at 0.3mm—0.75mm in coarseness depending on coating thickness. (at a nominal rate of 800g per sqm)

Cleaning

Remove excess epoxy from the unintended areas, spillages and tools as the work progresses with a wet sponge.

AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY materials are available worldwide.

For Distributor information:

Toll Free: 1800 331 012

Telephone: 07 3865 1599

For online distributor information, visit LATICRETE at www.laticrete.com.au

Cost

Contact a LATICRETE Distributor in your area.

MAINTENANCE

LATICRETE and LATAPOXY grouts, sealers and sealants require routine maintenance and cleaning with a neutral pH detergent and water. See TDS 1113 for more information.

All other LATICRETE and LATAPOXY non-finish materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

TECHNICAL SERVICES

Technical assistance

Information is available by calling:

Toll Free: 1800 331 012

Telephone: 07 3865 1599

Fax: 07 3865 2250

Technical and safety literature

To acquire technical and safety literature, please visit our website at

www.laticrete.com.au

DISCLAIMER

- The information contained in this document is given in good faith and to the best of our knowledge is true and accurate.
- This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information.
- The use of this product is beyond our control and liability is assumed by the user when used incorrectly and not in accordance with LATICRETE guidelines.
- The manufacturer is not responsible for any loss or damage arising from incorrect usage of this product.
- The specifier or other party responsible for the project must ensure that the details in this data sheet are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this specification.
- Efflorescence is a normal condition of Portland cement and is not covered by any warranty. The use of LATAPOXY 310 Stone Adhesive, LATAPOXY 300 Adhesive, SPECTRALOCK® PRO Premium Grout¹ and SPECTRALOCK 2000IG will not contribute to any noticeable efflorescence.

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¹ United States Patent No.: 6,881,768 (and other Patents).