SPECTRALOCK® 2000 IG

SPECTRALOCK® 2000 IG is a highly chemical resistant industrial grade epoxy grout for: ceramic tile, pavers, floor brick, packing house tile, and stone. SPECTRALOCK 2000 IG is supplied as factory proportioned kits consisting of epoxy resin, hardener, and chemical resistant silica filler.

Globally Proven Construction Solutions

FEATURES/BENEFITS

- High chemical resistance
- Improved temperature resistance
- Maximum physical strength
- Inhibits the growth of stain causing mould and mildew in the grout joints and protects with built-in Microban® anti-microbial technology.
- Highly resistant to bacteria attack
- Water cleanable
- Grout may remain in pail while grouting
- Fast curing
- Cures at low temperatures

USES

Use in corrosive environments such as:

- Industrial – bakeries, dairies, cheese factories, breweries, meat packing plants, soft drink plants, confectioneries, canneries, distilleries, pharmaceutical factories, veterinary hospitals, clinics and kennels.
- Commercial – institutional kitchens, fast food restaurants, cafeterias, laboratories, supermarkets.

PACKAGING/COLOUR

#2 Resin (Full Unit): bucket; 48 buckets per pallet

- Part A: 2 x 0.5 kg
- Part B: 2 x 1 kg

#4 Resin (Commercial Unit): carton; 56 cartons per pallet

- Part A: 4 x 0.5 kg
- Part B: 4 x 1 kg

MANUFACTURER

LATICRETE Australia Pty Ltd
29 Telford Street
Virginia, QLD 4014 Australia

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

Shelf Life

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

Limitations

- Maximum chemical resistance is achieved in seven (7) days at 21°C. Protect from exposure to strong chemicals until fully cured; at colder temperatures it takes longer to achieve full cure.
- For Interior use only.
- 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.
- Please consult with LATICRETE Technical Services for specific recommendations, if grout will be exposed to chemicals other than those indicated on the chemical resistant chart.
- LATICRETE recommends using the #2 or #4 size 2000IG liquids with #22 Midnight Black SPECTRALOCK powder for all backof-house / commercial restaurant installations where the use of enzymatic cleaners is common. For all other installations the #2 & #4 units can be used with all colours (except #44 Bright White).

Cautions

- Consult SDS for more safety information.
- See MAINTENANCE section for care, cleaning, maintenance and warranty requirements.
- Protect finished work from chemical exposure, dirt and traffic until fully cured.
- Until cured, SPECTRALOCK 2000 IG could cause skin burns and eye damage. Wear protective gloves, protective clothing, and eye protection. In case of contact, flush thoroughly with water
- **DO NOT** take internally. Silica sand may cause cancer or serious lung problems.
- Because propane gas heaters will cause epoxy grouts to yellow, refrain from using such heaters or properly vent all exhaust.
- Keep out of reach of children.
- Epoxy Resins may affect the colour of white or porous stones (such as White Carrara, Thassos white, royal Danby, etc.).
- Test stones for compatibility with water and cleaning additive mixture
- Conduct a test area to determine compatibility with metal or steel tile

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 Standards

Meets and exceeds the requirements of AS ISO13007.1 as an R2 Grout.

Registration #143530

NSF Registration assures inspection officials and end users that formulation and labels meet appropriate food safety regulation. NSF International launched its voluntary Non-food Compounds Registration Program in 1999 to re-introduce the previous authorisation program administered by the U.S. Department of Agriculture (USDA).

Service Temperature Range**

Intermittent Exposure	Up to 182°C
Constant Exposure	Up to 80°C

** Service Temperature Exposure defined as:
Intermittent – where hot materials, liquids or steam come in contact with grout for a short time
Constant – where grout is subjected to continuous heat such as under a bakery oven

Working Properties at 21°C

Working Time	80 Minutes
Wet Density	1500 kg/m^3

Evaluation per ANSI A118.3

Property	Value	
Test/No.	**Evaluation**	**Requirement**
Water Cleanability (E5.1)	Pass	80 minutes
Initial Setting Time (E5.2)	Pass	> 2.0 hours
Service Setting Time (E5.2)	Pass	< 7 days
Shrinkage (E5.3)	0.07%	< 0.25%
Sag (E5.4)	Pass	No change
Quarry Shear Bonds (E5.5)	15.2 MPa*	> 6.9 MPa
Compressive Strength (E5.6)	57.2 MPa	> 24 MPa
Tensile Strength (E5.7)	20.7 MPa	> 6.9 MPa
Thermal Shock (E5.8)	14.5 MPa	> 3.4 MPa

* Tile failed during test TCA-061-93

Evaluation per ANSI A118.5

Property	Test Method	Evaluation	Grout Requirement Silica
Compressive Strength	ASTM C579	63.8 MPa	21 MPa
Tensile Strength	ASTM C307	18.4 MPa	2.75 MPa
Absorption	ASTM C413	0.19%	Max. 1%
Modulus of Rupture	ASTM C580	37 MPa	4.1 MPa
Initial Set, Hours	ASTM C308	2	Max 5
Final Set, Days	ASTM C308	6	Max 7
Linear Shrinkage	ASTM C531	0.07%	Max. 1%
Working Time Minutes	ASTM C308	80	Min. 10
Bond Strength	ASTM C321	Pass**	1 MPa

** Brick failed during test

Time to Traffic

Floor Temperature	Cure Time		
	Time to Light Traffic*	Time to Heavy Traffic**	Full Cure***
10°C	20 Hours	32 Hours	8 – 10 Days
16°C	11 Hours	24 Hours	7 Days
21°C	8 Hours	16 Hours	7 Days
27°C	6 Hours	12 Hours	5 – 6 Days
32°C	4 Hours	4–5 Hours	3 – 4 Days

* Foot Traffic

** Place Equipment

*** Exposure to Chemical and Heat

Chemical Resistance* Chart

Chemical Name	Continuous Exposure	Intermittent Exposure	Splash Exposure
Food Acids			
Lactic to 10%	R	R	R
Acetic to 10%	R	R	R
Formic to 5%	R	R	R
Citric to 50%	R	R	R
Tartaric to 50%	R	R	R
Tannic to 50%	R	R	R
Oleic to 100%	R	R	R
Phosphoric to 80%	R	R	R
Mineral Acids			
Hydroflouric acid** 10%	R	R	R
Sulfuric to 50%**	R	R	R
Nitric to 30%**	R	R	R
Hydrochloric to** 36.5%	R	R	R
Corrosive Cleaners			
Sodium Hypochlorite** (Bleach) 3%	R	R	R
Sodium Hydroxide (Saturated)	R	R	R
Solvents			
Xylene	R	R	R
Ethyl Alcohol	R	R	R
Mineral Spirits	R	R	R
Toluene	R	R	R
Methylene Chloride	NR	NR	NR
Gasoline	R	R	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
** Long exposure may cause colour change
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.

INSTALLATIONS

Refer to SPECTRALOCK® 2000 IG How to Install Guide (DS 004.5) for more information.

Surface Preparation

Before starting to grout remove spacers and debris in grout joints and remove dust and dirt using a damp sponge. Allow to dry. Do not leave water standing in joints. Do not clean tiles with acid cleaners.

Substrate temperature must be between 7°C and 32°C.

Note: *Temperature will affect working properties of SPECTRALOCK 2000 IG. Warm temperatures will speed curing and shorten working time. Cool temperatures will slow curing and require longer time to traffic. Store SPECTRALOCK 2000 IG (including Part C) at 21°C for 24 hours prior to use.*

Mixing

Pour SPECTRALOCK 2000 IG Part A and Part B into a clean mixing pail and mix thoroughly with a drill mixer until liquids are completely blended. Add all of the Part C powder. The mix will look thick at the beginning. Whip it thoroughly with high speed mixer (>450 RPM) until uniformly blended (minimum 2 minutes) This will aerate the grout to very fluffy mix.

Application

For maximum pot life, remove grout from bucket and spread on floor or plastic sheeting. Spread the grout with sharp, firm rubber grout float. Work the grout paste into the joints. Insure the joint is filled and grout is not sitting on top. Remove excess grout from the face of the tiles with the edge of the grout float. Hold the float at 90° angle and pull it diagonally across the joints and tile to avoid pulling out the material.

Cleaning

Initial Cleaning

USE INITIAL WASH CLEANING ADDITIVE!

Once grout has been spread, wait approximately 30 minutes at 21°C prior to beginning initial wash. Add Initial Wash cleaning additive to 7.6 litres of clean water and mix until fully dissolved.

Do not mix cleaning additive with grout. Wipe grout joints and tile surface with a white nylon pad and plenty of water (with the cleaning additive) using a circular motion. Drag a damp clean sponge diagonally over the scrubbed surface to remove grout residue.

Final Cleaning

USE FINAL WASH CLEANING ADDITIVE!

Wait at least 90 minutes at 21°C for the final wash using the same procedure as in the initial wash. Prepare another 7.6 litres of clean water and add the Final Wash cleaning additive and mix until fully dissolved. In the final wash avoid contact with the grout – clean the tile surface only.

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

- All stone and tile should be maintained and sealed with LATICRETE STONETECH® professional products as appropriate for the specific tile/stone and installation situation.
- Rinsing of cleaner residue and debris with a clean water rinse is required to maintain product and systems warranty.
- Rinse fatty acid residue from grout and tile surface to avoid potential grout deterioration caused by prolonged exposure.
- Protect surfaces from common stains by using a STONETECH Bulletproof Sealer.
- Routine maintenance should follow with STONETECH Revitalizer® Cleaner and Protector or a neutral pH cleaner such as STONTECH Stone & Tile Cleaner.
- For tough or difficult to remove soil use STONTECH KlenzAll Cleaner, a nylon scrubbing pad or a long handled stiff bristle brush.
- For additional information, please refer to the TDS 1400 Grout Guide.
- All other LATICRETE and LATAPOXY 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.
- 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 Grout† and SPECTRALOCK 2000IG will not contribute to any noticeable efflorescence.

LATICRETE Australia Pty Ltd
29 Telford Street, Virginia
QLD 4014 Australia

1800 331 012
www.laticrete.com.au

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