

# **LATICRETE® SpectraLOCK 2000IG**

DS-502.0-0913

# Globally Proven Construction Solutions



#### 1. PRODUCT NAME

# **LATICRETE® SpectraLOCK 2000IG**

#### 2. SUPPLIER

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#### 3. PRODUCT DESCRIPTION

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.

**Usage**—Use in corrosive environments such as:

Industrial—bakeries, dairies, cheese factories, breweries, CIP rooms, 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.

#### **Advantages**

- High chemical resistance & Improved temperature resistance
- Maximum physical strength
- Inhibits the growth of stain-causing mould and mildew in the grout joints with Microban® antimicrobial product protection
- Highly resistant to bacteria attack
- Exceeds ANSI 118.3 (Epoxy) and ANSI 118.5 (Furan) performance requirements
- Water cleanable
- Fast curing & still cures at low temperature.

## **Packaging**

# 2 Unit Pail Kit (Complete Unit – Grey and Black) Unit Net Weight 12.96 kg) 48 Pails Per Pallet

**# 2 Unit Pail (Liquid Only)** Net Weight 4.8 kg 48 Pails Per Pallet **# 4 Unit Carton (Liquid Only)** Weight 7.3 kg 56 Cartons Per Pallet

#### **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 70°F (21°C). Protect from exposure to strong chemicals until fully cured; at colder temperatures it takes longer to achieve full cure.
- Grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® HYDROBAN 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.
- Not for use with the colour #44 Bright White.
- For interior use only.

# **Cautions**

- Consult MSDS for more safety information.
- Protect finished work from chemical exposure, dirt and traffic until fully cured.
- Until cured, SPECTRALOCK® 2000 IG 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.
- 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.

## 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 standards:

EN12004 R2; ISO 13007 R2; ANSI 118.2; ANSI 118.5

EVALUATION PER ANSI A118.3			
PROPERTY	VALUE		
TEST/ NO.	EVALUATION REQUIREMENT		
Water Cleanability (E5.1)	Pass	80 min.	
Initial Setting Time (E5.2)	Pass	> 2.0 hrs.	
Service Setting Time (E5.2)	Pass	< 7 days	
Shrinkage (E5.3)	0.07%	< 0.25%	
Saq(E5.4)	Pass	no change	
Quarry Shear Bonds (E5.5)	2200 PSI (15.2 MPa)*	> 1000 psi (6.9 MPa)	
Compressive Strength (E5.6)	8300 PSI (57.2 MPa)	> 3500 psi (24 MPa)	
Tensile Strength (E5.7)	3000 PSI (20.7 MPa)	> 1000 psi (6.9 MPa)	
Thermal Shock (E5.8)	2100 PSI (14.5 MPa)	> 500 psi (3.4 MPa)	

EVALUATION PER ANSI A118.5			
Property	Test Method	Evaluation	Grout Requirement Silica
Compressive Strength	ASTM C579	8300 PSI (57.2 MPa)	3000 psi (21 MPa)
Tensile Strength	ASTM C307	3000 PSI (20.7 MPa)	400 psi (2.75 MPa)
Absorption	ASTM C413	0.19%	Max. 1%
Modulus of Rupture	ASTM C580	5300 psi (37 MPa)	600 psi (4.1 MPa)
Initial Set, Hours	ASTM C308	2	Max 5
Final Set, Days	ASTM C308	6	Max 7
Linear Shrinkage	ASTM C531	0.06%	Max. 1%
Working Time Minutes	ASTM C308	80	Min. 10
Bond Strength	ASTM C321	Pass*	150 psi (1 MPa)

#### Time to traffic:

CURE TIME			
FLOOR TEMPERATURE	TIME TO LIGHT TRAFFIC*	TIME TO HEAVY TRAFFIC**	FULL CURE***
40°F (4°C)	24 Hours	48 Hours	7 Days
50°F (10°C)	20 Hours	32 Hours	7 Days
60°F (16°C)	16 Hours	24 Hours	7 Days
70°F (21°C)	5 Hours	10 Hours	5 Days
80°F (27°C)	4 Hours	7 Hours	1 Day
90°F (32.2°C)	2 Hours	3 Hours	12 Hours

<sup>\*</sup> Foot Traffic \*\* Place Equipment \*\*\* Exposure to Chemical and Heat

# Service temperatures:

Intermittent exposure	182'C
Constatnt exposure	80'C

<sup>\*\*</sup>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:

Working time	80 mins
Wet density	1500 Kg/M4

#### **Chemical Resistance:**

Chemical resistance chart			
Chemical Name	Continuous	Intermittent	Splash only
Food Acids			
Lactic acid to 10%	R	R	R
Acetic acid to 10%	R	R	R
Formic acid to 10%	R	R	R
Citric acid to 10%	R	R	R
Tartaric acid to 10%	R	R	R
Oleic acid to 10%	R	R	R
	Mineral acids	•	
Hydrofluoric acid** 10%	R	R	R
Sulphuric acid to 50%**	R	R	R
Nitric acid to 30%**	R	R	R
Hydrochloric acid 36.5%**	R	R	R
Phosphoric acid to 80%	R	R	R
	Corrosive clean	ers	
Hypochlorite bleach 3%	R	R	R
Caustic soda (conc'd)	R	R	R
	Solvents		
Xylene	R	R	R
Ethanol	R	R	R
Mineral Spirits	R	R	R
Toluene	R	R	R
Methylene Chloride	NR	NR	NR
Petrol	R	R	R

<sup>\*</sup> Chemical Resistance defined as:

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.

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

Refer to SPECTRALOCK® 2000 IG<sup>†</sup> 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 45°F (7°C) and 90°F (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 70°F (21°C) for 24 hours prior to use.

with ASTM C267.

\*\* Long Exposure will cause colour change.

# 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 a 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.

# Initial cleaning of the freshly grouted Tile face:

- Once grout has been spread, wait approximately 20 minutes before cleaning (or within one hour of initial mixing of product). Wait longer at colder temperatures.
- Add INITIAL WASH cleaning additive to 8 litres of clean water and mix until fully dissolved. Do not mix cleaning additive with grout.
- Submerge clean sponge into water and wring until damp.
- Change water with cleaning additive mixture every 5.0 m2 when using multiple units.
- Wipe grout joints and tile surface in a light circular motion, loosening grout residue while making the joints smooth.
- Drag a clean sponge diagonally over the scrubbed surfaces to remove grout residue. Rinse sponge after every pass; use each side of sponge only once between rinsing.
- Discard sponges when they become "gummy" with residue. Check work as you clean.
- 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 that are less than 3 mm on walls. Use light pressure when using folded terry cloth towel.

# Finished Inspection and Final tile face cleaning

- Begin final cleaning approximately one hour after initial wash has taken place. Prepare another 8 litres of clean water and pour in the FINAL WASH cleaning additive packet, & mix until fully dissolved.
- Follow the same process as the initial wash but use the clean white scrub pad in place of the sponge to break apart any leftover residue. Rinse scrub pad frequently.
- Then, drag a clean sponge diagonally over the scrubbed surfaces to remove froth and residue. Use each side of sponge only once before rinsing and change water and cleaning additive mixture at least every 5.0 m2 when using multiple units.
- Allow cleaned areas to dry and inspect tile/stone surface. For persistent grout film/haze (within 24 hours), scrub area with mixture of 7.5 litres of clean water and 120 ml of WHITE VINEGAR. Conduct a test area to verify results on polished stones.
- Rinse with clean water and allow surface to dry. Inspect grout surface and repair as required with freshly mixed grout.
- Unlike cement grout haze that can be buffed off the following day, LATICRETE SpectraLOCK 2000IG Premium Grout film/haze that is allowed to cure on the tile surface WILL be difficult to remove.

- Always check tile surface under good lighting once surface is dry.
- Protect finished surface from traffic for at least 12 hours at 21°C.
- Do not expose grout to ACID cleaners for 7 days.
- Allow grout to cure for 10 days at 21°C prior to use in submerged applications or steam rooms. See LATICRETE Technical Data Sheet 192 for more information.

## 6. AVAILABILITY AND COST

## Availability

LATICRETE and LATAPOXY® materials are available worldwide. For on-line Distributor Information, call 0151 486 6101 or visit LATICRETE UK at

www.laticrete.co.uk

#### 7. MAINTENANCE

Non-finish LATICRETE and LATAPOXY installation materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers. LATICRETE and LATAPOXY Grouts require routine cleaning with a neutral pH soap and water. Contact the cleaner manufacturer if another cleaner type will be used to ensure compatibility with the grout.

## 8. TECHNICAL SERVICES

#### **Technical Assistance**

Information is available by calling the LATICRETE UK Technical Service Hotline:

Tel: 0151 486 6101 Fax: 0151 448 1982

e-mail: sales@laticrete.co.uk

## **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at www.laticrete.co.uk

#### 9. 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.

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