

# LITHIUMCURE 1000

## EXTERIOR CONCRETE CURING AGENT - NSF-61 POTABLE WATER CERTIFIED

SINAK LithiumCure 1000 is a zero VOC, NSF/ANSI-61 Certified Curing Agent, Water-Cure Equivalent Type, used to cure & seal freshly placed exterior concrete. LithiumCure 1000 creates an internal membrane deep within the concrete substrate, resulting in improved hydration, elimination of slab curl and improved abrasion resistance. LithiumCure 1000 is recommended for use on exterior horizontal & vertical substrates, textured, broom finished, colored concrete and NSF-61 potable water applications.

LithiumCure 1000 is formulated to exceed the performance requirements for all ASTM C-309, ASTM C-1315, & ASTM C-39 blanket, burlap, and polyethylene water cure specifications while offering same day slab access. LithiumCure 1000 is tested and proven to chemically replicate 28-day water cure results and assures that the specified design strengths will be achieved along with improved durability and reduced permeability. LithiumCure 1000 permanently penetrates the concrete substrate and does not form a film or residue on the surface. LithiumCure 1000 is compatible with line striping, joint sealants, patching materials, sealers, and traffic coatings. Use of LithiumCure 1000 allows for the installation of sealers, coatings, or paint 5 days after concrete placement.

LithiumCure 1000 is available as an ASTM C-309, ASTM C-1315, Type 1, 1-D, and 2 Class A & B cure. LithiumCure 1000 is class 55 non-hazardous, non-toxic, contains no solvents, and is listed as UL GREENGUARD Gold Certified, LBC Red List Free, Super Compliant with SCAQMD and Buy American Act compliant. LithiumCure 1000's stable formula has an infinite shelf life and does not expire. LithiumCure 1000 is specifically designed for projects with a goal of retaining the natural concrete appearance while reducing the maintenance costs for the life of the structure.

## FEATURES & BENEFITS

- Replaces Curing Blankets
- NSF-61 Potable Water Certified
- Zero VOCs
- Eliminates Slab Curl
- Eliminates Cure Related Cracking
- UV Stable: Will not yellow
- Chloride Ion Protection
- Improves Abrasion Resistance
- Improves Skid Resistance
- LBC Red List Free
- Exceeds ASTM C-309 & ASTM C-1315
- Compatible with all Paint, Coatings, and Adhesives
- Compatible with 1L Concrete
- Sealers can be Installed 5 days after Concrete Placement
- Buy American Act Compliant

## WHERE TO USE LITHIUMCURE 1000

- Water Treatment Facilities
- Vertical Cast in Place Concrete
- Structural & Lightweight Concrete
- Horizontal Surfaces
- Below Grade
- Water Storage Tanks
- Concrete Pavements
- Parking Structures
- Sound Walls
- Shotcrete
- Pre-Cast Panels
- Elevator Pits
- Water Features
- Pool Decks
- Planters
- Garage Floors
- Podium Decks
- Animal Enclosures
- Exposed Aggregate
- Colored Concrete
- Stamped Concrete
- Pedestrian Bridges
- Pavers
- 1L Concrete



## SUSTAINABLE DESIGN REQUIREMENTS

- Zero VOCs
- UL 2818 Gold - GREENGUARD Gold Certified
- Environmental Product Declaration
- LBC Red List Free Declare Label
- Health Product Declaration
- Listed as Super-Compliant by the South Coast Air Quality Management District (SCAQMD)
- Exceeds the regulatory limits in the SCAQMD Rule 1113
- Meets the requirements to contribute for LEED credit in the following areas: EQ Credit 1.0, 4.1, 4.3, EQ Credit 10 3.1, MR Credit 5.1 and 5.2

## TESTING

- ASTM C-39** (Compressive Strength)
  - Meets or exceeds 28-day water cure
- ASTM C-309/C-1315: TYPE 1, 1-D, 2 CLASS A & B**
  - Exceeds water retention of less than 0.40 kg/m<sup>2</sup>
- NSF/ANSI 61** (Potable Water)
  - Passed
- NSF/ANSI 372** (Potable Water)
  - Passed
- AASHTO T 277-93/ASTM C-1202-94** (Chloride Permeability)
  - Meets or exceeds 28-day water cure
- ARKANSAS DOT / FHWA TEST**
  - 19-40% Less cracking than the 7-day water cure/ C-309 treated surfaces in comparison
- ASTM C-666:** (Freeze Thaw Resistance)
  - 0.85% Increase over 28-day water cured sample
- ASTM C-672:** (Scaling Resistance)
  - 61.4% Improvement over 28-day water cured samples
- ASTM C-944:** (Abrasion Resistance)
  - 29.4% Increase over 28-day water cured samples

## PRECAUTIONS

Do not allow LithiumCure 1000 to come into contact with any glass, metal, or painted surfaces. LithiumCure 1000 left to dry on the surface may result in streaking, or whitening. Immediately wipe affected surfaces with a clean cloth.

## COVERAGE RATES

Two-coat coverage rate is 200-250 sq ft per gallon (5-6 sq m per liter) for horizontal surfaces.

Two-coat coverage rate is 150-200 sq ft per gallon (4-5 sq m per liter) for vertical surfaces.

## INSTALLATION

Installation should be continuous. LithiumCure 1000 application should begin after the surface is firm enough to tolerate foot traffic without surface bruising or immediately after the early entry saw cutting. Apply a small test area to confirm penetration. If rain should occur at any time during this process, see '*Interrupted Installation*' at the end of this section.

1. Protect objects and areas not to be treated from spillage or overspray.
2. Apply first coat of LithiumCure 1000 uniformly wetting the surface with an airless or tank type sprayer.  
**DO NOT** allow LithiumCure 1000 to puddle or flood the surface.
3. Immediately after the first coat is dry, apply a second coat. Drying time will vary from 10 to 30 minutes depending on temperature and environment. **NOTE:** "Dry" means dry to the touch.
4. Pay special attention to apply material in joints and on slab edges. Treatment of these areas will eliminate slab curl.
5. Clean all equipment with warm soapy water.

## VERTICAL CAST-IN-PLACE INSTALLATION

1. Application of LithiumCure 1000 may begin immediately after forms are removed.
2. Apply the first coat of LithiumCure 1000 uniformly wetting the surface with an airless or tank-type sprayer. SINAK recommends applying product top to bottom with a maximum 1-2 inch run.
3. Verify the first coat has dried to the touch before beginning the second coat.
4. Apply the second coat uniformly wetting the surface.

**NOTE:** Sealers, paint, line striping, or coating installation may begin five days after concrete placement on areas treated with LithiumCure 1000. SINAK recommends a field bond test prior to coating installation.

## INTERRUPTED INSTALLATION

If the application should be interrupted by rain, mark the place of interruption, and continue the application as soon as weather permits. If the delay exceeds 4 hours contact SINAK for additional information.

## HOT WEATHER INSTALLATION

In hot (above 100°F or 38°C), dry and/or windy conditions apply LithiumCure 1000 shortly after loss (evaporation) of surface water. Contact SINAK for additional information.

## COLD WEATHER INSTALLATION

Do not apply below 34°F (1°C). Allow ample time between coats for drying. Contact SINAK for additional information.

## STORAGE & HANDLING

LithiumCure 1000 has an infinite shelf life when stored in a cool dry area out of direct sunlight. Must be kept in tightly secured containers to prevent evaporation and contamination. LithiumCure 1000 **MUST** be protected from freezing. Product that has frozen will not function as intended and should be discarded.

## AVAILABILITY

LithiumCure 1000 is available in 1-gallon (3.78-liter) jugs, 5-gallon (18.9-liter) pails, 55-gallon (208.2-liter) drums and 275-gallon (1041-liter) totes.

## TECHNICAL ASSISTANCE

Technical assistance is available from the manufacturer (800) 523-3147 [www.SINAK.com](http://www.SINAK.com).

SINAK warrants its products to be free from manufacturing defects and to meet the technical properties on the current product information sheet. To the maximum extent permitted by law, this express warranty and the remedies specified below are exclusive and in lieu of all other warranties and remedies. Any implied warranties including without limitation implied warranties of merchantability and fitness for a particular purpose are excluded. SINAK's liability under this product warranty shall be limited to a refund of purchase price or replacement of the product. SINAK shall have no liability for any loss of use, interruption of business, lost profits or goodwill, or for any special, incidental or consequential damages of any kind arising from the purchase or use of the warranted product, even if SINAK has been advised of the possibility of such loss, interruption or damage. This limited warranty may not be modified by representatives of SINAK, its distributors or dealers. Any claim made under this warranty must be made within one (1) year of purchase and shall be accompanied by any reports or test results that form the basis of the warranty claim. Prior to settlement of a warranty claim, SINAK shall have the right, but not the obligation, to conduct site inspections and perform tests pertaining to the customer's warranted product and its manner of use.