



# LithiumCure 1000™



## PRODUCT DESCRIPTION

**SINAK LithiumCure 1000™** is formulated to meet or exceed the performance requirements of concrete water cure specifications. **LithiumCure 1000™** minimizes or eliminates plastic shrinkage cracking and is especially effective in hot, windy, and low-humidity conditions. **LithiumCure 1000™** is recommended for bridge decks, parking structures, airports, pavements and pre-cast elements.

## ADVANTAGES

- **Better than water cure**
- **Prevents cure related cracking**
- **Reduces permeability**
- **Controls slab curl**
- **Will not stain or alter the surface**
- **Not a bond breaker**
- **Saves 7-days in the construction schedule**
- **Excels in hot weather**
- **No mixing or dilution required**

**LithiumCure 1000™** is a ready-to-use, zero-VOC concrete cure that outperforms all traditional wet-cure methods such as blankets, plastic sheeting, steam curing, etc. while eliminating the construction delays caused by water curing. **LithiumCure 1000™** does not interfere with the bonding of joint sealants, patching, surface coating materials, paints, lane markers or cement wash treatments. Overspray on reinforcement steel does not require removal. **LithiumCure 1000™** is a clear solution. It can be colored by using titanium dioxide or fugitive dyes.

## CURE EFFECTIVENESS

**LithiumCure 1000™** is applied earlier than other curing methods. **LithiumCure 1000™** retains high internal humidity which significantly reduces cracking and produces high quality, low permeable concrete. **LithiumCure 1000™** will not stain or alter the appearance like plastic or blankets, and does not require removal as membranes do.

## SEALING

**LithiumCure 1000™** can also be used as a sealer when additional protection is required. **LithiumCure 1000™** waterproofs and protects against freeze thaw damage. **LithiumCure 1000™** will not stain, discolor or alter the appearance, surface texture or skid-number (SN) rating. **LithiumCure 1000™** treated surfaces are compatible with coatings, striping, cementitious toppings, caulking, crack repair, topically applied systems, etc. When used as a sealer, **LithiumCure 1000™** never requires reapplication.

Areas to receive **LithiumCure 1000™** must be free of dirt, oil and debris. Concrete must be in place for a minimum of 14 days with a completely dry surface.

## TEST RESULTS

### ASTM C39

Compressive Strength PSI  
*-Meets or exceeds 7-day water cure*

### AASHTO T 277-93/ASTM C 1202-94

Rapid Chloride Permeability Test (28 Days)  
*-Meets or exceeds 7-day water cure*

### BS 1881: Part 5

Initial Surface Absorption ml/m<sup>2</sup>/sec (28 Days)  
*-Meets or exceeds 7-day water cure*

### Arkansas DOT / FHWA Test:

19-40% Less cracking than the 7-day water cure/ C-309 treated surfaces in comparison

## LONG TERM BENEFITS

**LithiumCure 1000™** improves the durability of bridge decks and pavements by eliminating surface cracks and decreasing permeability. **LithiumCure 1000™** is inorganic and will not diminish over time. It will provide protection against water borne contaminants, increase abrasion resistance and protect surfaces against oil, chemical staining and damage.

## TECHNICAL INFORMATION

### Composition and Materials:

**LithiumCure 1000™** is a water-based liquid with a proprietary formula in solution. It requires NO mixing, diluting or agitation.

Color: Water clear; Specific Gravity: 1.1; Net Weight: 9.2 lbs/gal; Dry Solids Content (by weight): 11.1%; Flash Point: none; Toxicity: Non-toxic; VOC: Contains NO volatile organic compounds or solvents.

## SINAK SYSTEMS

- **SINAK Finishing Aid:** All concrete, grout and mortar products.
- **SINAK VC-5:** Moisture vapor and alkalinity control curing agent with 15yr flooring warranty.
- **SINAK LithiumCure 2000:** Hard trowelled/burnished slabs or polished concrete.
- **SINAK LithiumCure 1000:** All exterior open surface profiled concrete.
- **SINAK WCE:** Potable water applications.

## INSTALLATION

### General Application Instructions:

Apply **LithiumCure 1000™** using a tank type or airless sprayer. Do not allow **LithiumCure 1000™** to puddle. Pay special attention to apply material in joints and on slab edges. Treatment of these areas will significantly minimize slab curl. Clean all equipment by rinsing with water.

### Bridge Decks & Pavements:

After final finishing, texturing, and/or tining has been completed, apply **LithiumCure 1000™** in one coat until the surface appears shiny. Final spread rate should be between 200-300 square feet per gallon.

### Parking Structures:

After final finishing or texturing has been completed, apply **LithiumCure 1000™** as soon as the concrete will support foot traffic without bruising the surface. Apply **LithiumCure 1000™** in one coat until the surface appears shiny. Final spread rate should be between 200-300 square feet per gallon.

### Vertical Cast-in-Place Concrete:

After stripping the forms apply **LithiumCure 1000™** at a rate of approximately 400-600 square feet per gallon. Do not allow the material to run down the surface. When the first coat is dry, apply a second coat at a rate of 400-600 square feet per



gallon. Areas that absorb at a higher rate should be treated with additional product. Final spread rate should be between 200-300 square feet per gallon.

#### **Sealing:**

After concrete has been in place for a minimum of 14 days, areas to receive **LithiumCure 1000™** sealer must be free of dirt, oil and debris. When surface is clean and dry, apply **LithiumCure 1000™** in one coat until the surface remains damp. Final spread rate should be between 150-250 square feet per gallon.

#### **HOT WEATHER APPLICATION:**

In hot, dry, and/or windy conditions (above 85°F), apply **LithiumCure 1000™** as soon as possible. Contact SINAK Corporation for additional information.

#### **COLD WEATHER APPLICATION:**

**LithiumCure 1000™** can be applied at a temperature of 35°F and rising. Do not apply **LithiumCure 1000™** to frozen substrates. Contact SINAK Corporation for additional information.

#### **STORAGE AND HANDLING**

**LithiumCure 1000™** has an indefinite 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 5-gallon pails, 55-gallon drums and 275-gallon totes from selected distributors.

#### **MAINTENANCE**

After application, no special maintenance is required.

#### **TECHNICAL ASSISTANCE**

Technical assistance is available from the manufacturer and trained field representatives.

#### **LIMITED WARRANTY**

SINAK Corporation warrants its products to be of the highest quality. Since application of the product is a crucial factor in obtaining satisfactory results, and is beyond the control of SINAK Corporation, refund of purchase price or replacement of product shall constitute the limit of SINAK Corporation's liability. SINAK Corporation makes no other warranties, express or implied, with respect to the products or any service and disclaims all other warranties, including any warranty of merchantability and fitness for a particular purpose. This limited warranty may not be modified by representatives of SINAK Corporation, its distributors or dealers.



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