

## CHEM HARD™

Chemical Hardener and Dustproofers

### MANUFACTURER

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### PRODUCT DESCRIPTION

CHEM HARD chemically reacts with soft free lime and calcium carbonate compounds in concrete forming dense, insoluble, chemically resistant flint-like surfaces. CHEM HARD is a VOC-compliant, colorless solution of a carefully controlled concentration of 100% active sodium silicate chemicals with a non-acid penetrant. CHEM HARD may be applied to fresh or hardened concrete as a chemical hardener and dustproofers.

**Basic Use:** CHEM HARD is recommended for light industrial plants, warehouses, laundries, as well as in food storage plants and bakeries. It is also appropriate for areas with frequent foot traffic such as civic centers, sports arenas, stadiums and other commercial buildings.

### FEATURES & BENEFITS

- A low cost treatment of exposed concrete surfaces.
- Residue-free surface allows bond of varied paints, adhesives or toppings.
- Low odor. No solvent vapors.
- Fast drying.

### ESTIMATING

CHEM HARD is available in 5-gallon (18.9 liter) and 55-gallon (208 liter) containers. Containers are identified with product name and batch number.

**Typical Application Rate:** 300 ft<sup>2</sup>/gallon (7.5 m<sup>2</sup>/liter).  
Two coats normally recommended.

### TECHNICAL DATA

#### Applicable Standards:

Fed. Spec. CEGS 03300 4-79,  
Dept. of Navy,  
Veterans Administration, GSA  
ACI 302, Class 1 through 4 Concrete Floors  
USDA approved for meat and poultry  
VOC compliant

#### Typical Properties:

Flash Point -	None
Viscosity -	Water-like
Color -	Clear
Type Solids -	Sodium Silicate
VOC, gm/l -	0

### INSTALLATION

#### Surface Preparation:

**Old Concrete:** Surfaces must be strictly sound and clean. All residue, oil, sealers, waxes, contaminants and laitance must be removed from surfaces for maximum penetration. Remove unsound concrete and repair holes, cracks and deteriorated areas. Apply two or more uniform coats at the rate of 300 ft<sup>2</sup>/gallon (7.5 m<sup>2</sup>/liter) each coat as needed. Allow a minimum of 4 hours between coats.

**New Concrete:** Spray first coat uniformly after surface water glaze is gone, at the rate of 300 ft<sup>2</sup>/gallon (7.5 m<sup>2</sup>/liter). Apply second coat uniformly at the same rate in the opposite direction. Squeegee or wipe up all puddling.

Fresh concrete placed in enclosed areas without adequate ventilation will hold water in concrete causing a super saturated condition. When CHEM HARD is applied in such conditions, it may build on surfaces creating a very slippery jelly-like silicate residue. Flush with water and squeegee off residue before it dries. Re-apply CHEM HARD after floor has thoroughly dried.

### FOR BEST RESULTS:

Apply when concrete surface temperatures are 40°F (4°C) and rising. Apply to oil-free and thoroughly cleaned, sound concrete surfaces.

CHEM HARD is intended for use as a supplemental treatment and is not a substitute for good concrete or good concreting practices.

Provide adequate ventilation in enclosed areas to facilitate proper drying. Do not puddle.

### PRECAUTIONS

Do not freeze. CHEM HARD will etch glass and painted surfaces. Wear goggles. Immediately wash off with water all overspray from glass, metal surfaces and other materials which may be damaged.

### STORAGE/SHELF LIFE

CHEM HARD containers are to be sealed and stored in a cool, dry place above 40°F (4°C). Shelf life is two years in unopened containers when properly stored.



## **WEBSITE**

L&M's convenient internet website offers instant access to Tech Data Sheets, Material Safety Data Sheets, product updates, and other useful information. Visit [www.lmcc.com](http://www.lmcc.com) and follow the easy steps. L&M is ready to respond to your concrete information needs - anytime - anywhere!

## **SHORT SPEC**

033000- Chemical hardener. Clear, VOC compliant chemical hardener. Five year warranty against dusting. Two coats required. "CHEM HARD" by L&M Construction Chemicals, Inc.

## **LIMITED WARRANTY**

Contact L&M for information on a five year performance warranty, which requires installation by an approved installer. This product is warranted to be free of defects in material and workmanship, and conform to L&M Construction Chemicals ("L&M") quality control standards. All recommendations, statements and

*technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to, an implied warranty of merchantability or an implied warranty of fitness for a particular purpose. Satisfactory results depend upon many factors beyond L&M's control. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product. L&M shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. L&M's sole responsibility shall be to replace that portion of the product which proves to be defective. Any warranty claim must be made within six (6) months from the date of the claimed breach. This limited warranty applies only if the product was properly installed and used according to all instructions and was properly stored prior to use.*

**For Professional Use Only.**

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