



# **SEALHARD**<sup>®</sup>

Concrete Sealer, Densifier, Chemical Hardener

### MANUFACTURER

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# **PRODUCT DESCRIPTION**

**SEAL HARD** is a proprietary, colorless chemical solution that increases the wear surface strength of concrete floors subjected to pedestrian and vehicle traffic. **SEAL HARD** penetrates concrete surfaces to seal, densify, harden and waterproof them. **SEAL HARD** floors last longer, cost less to maintain, are safe to use, and are guaranteed to resist dusting for years after application. It is VOC-compliant, odorless, environmentally safe and simple to apply.

Through a chemical-ion exchange process, **SEAL HARD** develops internal bonds which densify the concrete substrate into a hardened, chemically-cured, homogeneous, concrete mass that resists abrasion, and reduces oil and water penetration. This chemical-ion exchange process begins after treatment and continues through the initial six months following application.

With its odorless formula, **SEAL HARD** is safe to use. **SEAL HARD** is also safe to own. The deeply penetrating chemical action leaves no film and will not alter the natural non-slip texture of the concrete floor.

**SEAL HARD** treated floors provide a significant savings in maintenance costs over conventional acrylic, epoxy and urethane sealers. **SEAL HARD** will not yellow, discolor, chip, peel or show unsightly wear patterns with use. **SEAL HARD** will not tire mark. In fact, the more a **SEAL HARD** floor is used and matures, the better it looks.

*Basic Use*: **SEAL HARD** is recommended for use in areas subjected to fork lift and tow motor traffic: warehouses, distribution centers, manufacturing plants, textile mills, bottling plants, coolers and freezers, food processing plants, canning factories, breweries, bakeries, meat and poultry processing plants, service garages, grocery stores, discount retail stores, hub transfer facilities.

Other uses include concrete floors subjected to heavy pedestrian traffic, such as: civic centers, sports arenas, stadiums, hospitals, airports, museums, schools and grocery stores; parking decks, sewage treatment plants, dairies, fish processing plants, refineries and water treatment plants.

## **ESTIMATING**

*Container Sizes:* **SEAL HARD** is readily available from an international network of stocking distributors in factory-

sealed 5 gallon (18.9 liter) and 55-gallon (208 liter) containers. Each container is properly identified with product name and batch number.

Typical Application Rate: 200 ft<sup>2</sup>/gallon (5 m<sup>2</sup>/liter)

# **TECHNICAL DATA**

#### Applicable Standards:

Fed. Spec. CEGS 03300 4-79

Dept. of Navy, GSA, VA

Recommended for ACI 302, Class 1 through 4 concrete floors, and Class 9, super flat floors

USDA-Approved

#### Typical Properties:

Active Ingredients:	100%
Туре	Proprietary Blend
Flash Point, °F	None
Specific Gravity	$1.15 \!\pm\! .02$
Abrasion Resistance, ASTM-C779	
Reduction of Wear	>50%
Increased wear resistance	>200%
Skid Resistance, ASTM-E-303	Good
NFSI-101.A	High Traction
Odor:	None
Color:	Clear
Dry Time:	2-4 hours
VOC (gms/Liter):	0.0

## INSTALLATION

New Concrete Surface Preparation: After final troweling and surface water glaze has dissipated, moist cure concrete or apply clear, non-residual curing compound, L&M CURE. Plastic sheeting or curing fabrics may be used, but care should be taken to prevent objectionable stains. Allow new concrete to cure a minimum of 72 hours. Clean concrete of any dirt, residue, debris or curing compound membrane before installing SEAL HARD. Use of clear resin or wax curing compound complying with ASTM C 309 is acceptable. However, these must be chemically removed with L&M CITREX or other approved nonacid cleaner prior to installation of SEAL HARD.

*Application:* Apply, directly from container, one undiluted, saturating coat. Aggressively scrub into the surface with a mechanical scrubber or bristle broom. This scrubbing will help achieve maximum penetration and will begin to polish hard-troweled floors. Do not use metallic brushes.

Keep surfaces wet with **SEAL HARD** for a minimum of 30 minutes and continue scrubbing and/or brooming. When product begins to thicken, sprinkle with water and scrub another 10-15 minutes. At thistime, thoroughly

flush excess **SEAL HARD** with clean water and remove all solution from the floor by squeegee and wet vacuum. This residue solution is non-toxic and can be emptied into a sanitary sewer. *Warning:* Failure to thoroughly wash and remove all excess material from floor surfaces may result in unsightly white residue stains.

On porous, rough-textured, or broom finished surfaces; concrete that has been poorly finished or is understrength; and in conditions where protection from oil and other contaminate penetration is desired, a second application can be installed approximately 2-4 hours following the first coat, or anytime thereafter. Floors are immediately available for occupancy after removal of the rinse residue.

*Approved Applicators:* For best results L&M has trained and qualified a number of approved applicators and recommends their use. Additional warranties are available if an approved installer is used. Contact L&M for details and further warranty requirements.

*Old (Existing) Concrete Surface Preparation:* Surfaces must be clean and structurally sound. Remove all residue, oil, membrane curing compounds, sealers, contaminants, and laitance in order to insure maximum penetration and chemical reaction. Problems may occur with acid etching and mechanical abrasion. Repair all holes, cracks and deteriorated areas with L&M repair mortars.

Application to Old (Existing) Concrete: Follow the same application procedures as found under New Concrete. Depending on surface porosity, application rate may range from 150-200 ft<sup>2</sup> /gallon ( $4-5m^2/L$ ). Additional coats may be required in some situations due to porosity or extreme dusting.

#### FOR BEST RESULTS:

- Keep from freezing.
- Apply when temperatures are above  $40^{\circ} F(5^{\circ} C)$ .
- Not effective on extremely porous or worn concrete.
- SEAL HARD is not a curing compound. Use on concrete that is less than three days old will inhibit the penetration of SEAL HARD and will reduce its ultimate effectiveness.
- **SEAL HARD** is a colorless solution that will not alter the appearance of the concrete surfaces. It will, therefore, not hide serious staining or excessive wear. For porous, worn or stained concrete surfaces, contact your local L&M representative for special assistance.
- In hot weather, pre-dampen concrete surfaces with water to cool. After standing water dissipates, apply **SEAL HARD**.
- Immediately wash off over-spray from glass, aluminum, or highly-polished surfaces with water to avoid etching of surfaces. Flush equipment with water to clean. Do not allow **SEAL HARD** to dry before flushing excess from surfaces.

## PRECAUTIONS

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not take internally. Wear skin and eye protection. Please refer to product Material Safety Data Sheet (MSDS) before using.

## STORAGE/SHELF LIFE

**SEAL HARD** containers are to be stored in a clean, dry area between  $40^{\circ}$ F and  $100^{\circ}$ F (5°- $40^{\circ}$ C). Shelf life of **SEAL HARD** in unopened containers is a minimum of two years if properly stored. Do not freeze.

## FAX ON DEMAND/WEBSITE

L&M's exclusive Fax On Demand and its convenient internet website offer instant access to Tech Data Sheets, Material Safety Data Sheets, product updates, and other useful information. Simply dial 800-839-9887 or visit <u>www.lmcc.com</u> and follow the easy steps.

## **SHORT SPEC**

03300: Concrete densifier, sealer, hardener. All exposed concrete surfaces to be treated with alkaline siliconate solution to harden, seal and densify exposed concrete. Reduction of abrasion, ASTM-C-779, greater than 50%. Applied by an Approved Applicator - 10 year warranty. "SEAL HARD" by L&M Construction Chemicals, Inc.

## LIMITED WARRANTY

**Requires an approved applicator.** L & M guarantees that, after an initial cure period of 90 days, properly prepared and treated sound concrete surfaces are chemically hardened and densified for a minimum of ten (10) years. Should **SEAL HARD** that was installed by an L&M approved applicator fail to perform as specified, L & M will supply sufficient **SEAL HARD** to retreat the failed area.

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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