

MasterFormat: 03 35 00

**JUNE 2016** (Supersedes May 2012)

# LIQUI-HARD® ULTRA

# **Molecular Concrete Densifier and Chemical Hardener**

#### **DESCRIPTION**

LIQUI-HARD ULTRA concrete densifier and chemical hardener is a waterborne, lithium-silicate-based, ready-touse, colorless liquid, which hardens and dustproofs concrete at a molecular level. After proper application, the finished surface offers substantial improvement in abrasion and chemical resistance and will significantly improve the durability of the surface when compared to untreated concrete. As LIQUI-HARD ULTRA is applied and penetrates into the concrete surface, a chemical reaction takes place, producing a byproduct that fills in the pores of the concrete. LIQUI-HARD ULTRA solidifies the concrete, eliminating dusting and pitting.

LIQUI-HARD ULTRA is chemically engineered to provide timely, quick, sustainable performance. The product is simply sprayed on and then left moist on the surface for 20 minutes. In this short period of time, the colorless liquid quickly penetrates into the surface. After application, the resulting surface features enhanced protection and sheen, coupled with superior abrasion resistance. This environmentally safe, water-based product features a zero VOC content and provides an attractive option in green building applications.

#### **USES**

LIQUI-HARD ULTRA is recommended for use wherever hardened, dustproofed, and improved chemical and abrasion resistant surfaces are required. Ideal applications include floors in restaurants, industrial plants. warehouses, storage silos, sewage plants, chemical processing facilities, refineries, and heavy pedestrian floor traffic areas, such as civic centers, sports arenas, stadiums, hospitals, airports, and museums. LIQUI-HARD ULTRA can successfully be used in conjunction with shake-on hardeners.



The INDUROSHINE® polished concrete system combines green concrete polishing and diamond grinding equipment with LIQUI-HARD ULTRA to create a unique, high sheen, wear-resistant concrete floor. Also works well on concrete countertops. Please contact W. R. MEADOWS for more information.

# **FEATURES/BENEFITS**

- Penetrates deeply into concrete to densify and harden surfaces to help prevent entry of moisture and other foreign matter.
- Quick and easy, hassle-free application procedure (no flushing or rinsing required).
- Improved freeze/thaw resistance.
- Dustproofs and improves chemical, petroleum, and abrasion resistance of treated surfaces.
- Provides a permanent, attractive sheen with the ability to polish.
- · Protects against scratching or peeling.
- Provides tough, protected surface that won't yellow, discolor, or show pedestrian or vehicular traffic wear marks.
- Improves light reflectance.
- May be burnished.
- Compatible with BELLATRIX® for an enhanced concrete floor.
- Ready to use from container and easy to apply.
- Saves time on the polishing/burnishing process.
- · Indoor or outdoor use.
- Environmentally safe, non-hazardous.
- VOC content is 0.00 g/L.

#### **PACKAGING**

5 Gallon (18.93 Liter) Pails 55 Gallon (208.20 Liter) Drums

# COVERAGE

Type of Surface ft.2/gal. m<sup>2</sup>/L Fresh (Newly Placed) 650 - 800 15.95 - 19.63 Existing (Steel) 450 - 600 11.04 - 14.72 Existing (Broomed) 300 - 400 7.36 - 9.82Note: Coverage rates may vary, depending on the finish and

porosity of the concrete.

# **SHELF LIFE**

When stored indoors in original, unopened containers at temperatures between 40° - 90° F (4° - 32° C), optimum performance and best use is obtained within one year of date of manufacture.

# SPECIFICATIONS/STANDARDS

- Complies with all current federal, state, and local maximum allowable VOC requirements, including U.S. EPA, SCAQMD, and OTC.
- Treated surface is USDA accepted.

#### CONTINUED ON THE REVERSE SIDE ...

# W. R. MEADOWS, INC.

P.O. Box 338 • HAMPSHIRE, IL 60140-0338 Phone: 847/214-2100 • Fax: 847/683-4544 1-800-342-5976

www.wrmeadows.com • info@wrmeadows.com

HAMPSHIRE, IL / CARTERSVILLE, GA / YORK, PA FORT WORTH, TX / BENICIA, CA / POMONA, CA GOODYEAR, AZ / MILTON, ON / SHERWOOD PARK, AB

# PAGE 2 ... LIQUI-HARD ULTRA #378-A ... JUNE 2016

#### **APPLICATION**

**Surface Preparation** ... Fresh Concrete: On newly placed concrete, LIQUI-HARD ULTRA can be applied after final troweling.

For a curing and hardening system, use MED-CURE™ curing aid from W. R. MEADOWS immediately after final finishing operations have been completed. Apply LIQUI-HARD ULTRA according to below existing concrete directions a minimum of three days (preferably 28 days) after placement of concrete.

Existing (Old) Concrete: Surface should be clean and structurally sound. Remove all residues, curing compounds, oils, sealers, contaminants, and laitance before applying LIQUI-HARD ULTRA. Fill and repair all holes, cracks, and deteriorated areas that have been removed to sound concrete.

**Mixing** ... For optimum performance, gentle mixing or agitation is recommended.

**Application Method** ... Fresh Concrete: Apply undiluted LIQUI-HARD ULTRA at approximately 650 - 800 ft.²/gal. (15.95 - 19.63 m²/L) using a low-pressure sprayer, such as a Chapin 1949, or by spreading evenly with a soft-bristled broom. Do not allow material to puddle on the surface. No further application steps are required for fresh concrete.

Existing (Old) Concrete: Moisten the surface with undiluted LIQUI-HARD ULTRA by sprayer or microfiber applicator. When spraying, a spray nozzle that produces a flow of 0.5 GPM (1.9 LPM) under 40 psi (0.276 MPA), is recommended. LIQUI-HARD ULTRA should be sprayed in a fine fog pattern. Keep surface moist with LIQUI-HARD ULTRA for 20 minutes but do not let material stand and puddle. If excess material is still on surface after 20 minutes, use a microfiber applicator to even out excess material. Pay particular attention to steel-troweled surfaces. After initial 20 minutes, let the surface dry.

Note: For concrete older than 28 days, please contact a W. R. MEADOWS representative at 1-800-342-5976.

**Burnishing** ... LIQUI-HARD ULTRA can be burnished to a high sheen on steel trowel concrete floors. A high-speed burnisher (2000 - 2200 rpm) with appropriate maintenance pad is needed.

**WARNING** ... Immediately wash off over-spray from glass, aluminum, or highly polished surfaces with water to avoid etching of surfaces.

**Drying Time** ... 2 - 4 hours. LIQUI-HARD ULTRA dries very quickly on newly placed concrete. Drying times may be extended on existing (old) concrete due to surface conditions. Restrict foot traffic for at least four hours; 12 hours is preferable.

**Cleanup** ... While still wet, equipment may be cleaned quickly and easily with soap and water.

#### **PRECAUTIONS**

DO NOT DILUTE. Do not apply if the temperature of the concrete is less than 40° F (4° C) or above 135° F (57° C). **KEEP FROM FREEZING**. If frozen, product should be thawed and agitated slightly prior to use. If excess material remains on surface after 20 minutes, mop or spread out to a thin, even material coverage. Do not allow excess material to puddle. Do not over apply. Apply two thin coats if necessary. Do not cover freshly treated area with plastic. If treated area needs to be protected from other trades, cover with a "breathable" covering, such as construction paper.

# **HEALTH AND SAFETY**

LIQUI-HARD ULTRA is non-combustible. Direct contact will result in irritation of the skin and eyes. Inhalation of product mist may result in respiratory irritation. Refer to Safety Data Sheet for complete health and safety information.

#### **LEED INFORMATION**

May help contribute to LEED credits:

- IEQ Credit 4.2: Low-Emitting Material Paints & Coatings
- IEQ Credit 4.3: Low-Emitting Materials Flooring
- MR Credit 2: Construction Waste Management
- MR Credit 5: Regional Materials

For most current data sheet, further LEED information, and SDS, visit www.wrmeadows.com.





# LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

#### **Disclaimer**

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control

over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.

© W. R. MEADOWS 2022 03/20-0M