



EUCO DIAMOND HARD

LIQUID DENSIFIER AND SEALER FOR CONCRETE

DESCRIPTION

EUCO DIAMOND HARD is a unique blend of silicate and silicate polymers that penetrate concrete surfaces and chemically react to provide an increase in surface density, durability, and abrasion resistance. Concrete treated with EUCO DIAMOND HARD is dust-proofed, resists tire marks, and is easier to maintain. Over time, EUCO DIAMOND HARD provides an attractive, slip resistant sheen to concrete that never peels, fades, or wears away.

PRIMARY APPLICATIONS

- Interior or exterior
- Warehouse floors
- Commercial and retail floors
- Manufacturing plants
- Distribution centers
- Diamond polishing concrete

FEATURES/BENEFITS

- Reduces porosity and increases durability of the concrete surface
- Complies with VOC regulations across North America
- Treated surfaces have increased liquid repellency
- Equipment can be cleaned with water
- Minimizes tire marks and enables them to be more easily removed
- Can be applied to new or existing concrete

TECHNICAL INFORMATION

Typical Engineering Data

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

VOC Content.....≤5 g/L

Drying Time at 70°F (21°C):

Light Foot Traffic 4 to 6 hours

Wheel Traffic24 hours

Abrasion/Wear Resistance, ASTM C779
(see adjacent table)

Coefficient of Friction, ASTM F609

Untreated Control (Wet/Dry).....0.78/0.77

Euco Diamond Hard (Wet/Dry).....0.74/0.77

Liquid Repellency, RILEM Method 11.4

Water absorbed in 24 hours:

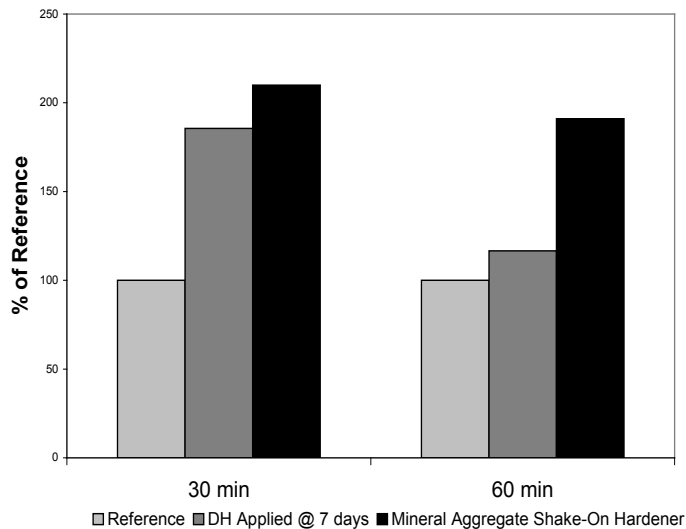
Untreated concrete: 5 mL

EUCO DIAMOND HARD treated concrete: 1 mL

Chemical Resistance: For a complete chemical resistance chart, contact The Euclid Chemical Co.

Appearance: EUCO DIAMOND HARD is a clear, water-based liquid that cures without a significant change in concrete appearance. During placement, the color of the concrete may initially appear darker but will lighten upon drying. Tightly troweled concrete surfaces treated with EUCO DIAMOND HARD will achieve a glossy sheen over time with traffic and regular cleaning or buffing. If immediate gloss is desired, the floor may be dry buffed with a lambswool buffing pad after the sealer has cured for a minimum of 24 hours.

EUCO DIAMOND HARD
ASTM C 779 Wear Resistance Results @ 28 Days



PACKAGING

EUCO DIAMOND HARD is packaged in 275 gal (1041 L) totes, 55 gal (208 L) drums and 5 gal (18.9 L) pails.

SHELF LIFE

2 years in original, unopened container

SPECIFICATIONS/COMPLIANCES

- USGBC LEED Version 4, BD&C, ID&C
- The WELL Building Standard
- ANSI/GBI 01, Green Building Assessment Protocol
- Canadian Food Inspection Agency

COVERAGE

One gallon of EUCO DIAMOND HARD will cover 200 to 250 ft²/gal (4.9 to 6.1 m²/L) of steel troweled concrete depending on the surface porosity and texture.

DIRECTIONS FOR USE

EUCO DIAMOND HARD should be used directly from the container and requires no pre-mixing or blending.

Surface Preparation (Newly Placed Concrete): Cure the concrete by a wet or sheet cure method in accordance with ASTM C-171, or with a curing compound such as KUREZ DR VOX. New concrete should cure seven days or longer before application of EUCO DIAMOND HARD. For fast track projects, the wet cure time may be reduced at the discretion of the project engineer. Remove the curing method, including any laitance formed on the surface, and allow concrete to air dry a minimum of 24 hours prior to application of EUCO DIAMOND HARD. **If a curing compound is used, it must be fully removed before applying EUCO DIAMOND HARD.** Failure to follow these preparation steps will prevent full penetration of EUCO DIAMOND HARD, drastically reducing its effectiveness.

Surface Preparation (Existing/Older Concrete): Concrete that is already in service or older floors must be clean and free of any materials that could prevent penetration of EUCO DIAMOND HARD, such as curing compounds or cure & seals, paints, coatings, dirt/oil, waxes, etc. If necessary, use EUCO CLEAN & STRIP to remove these contaminants before applying EUCO DIAMOND HARD.

Application (New or Old Concrete): Air temperature during application must be between 35°F and 100°F (2°C and 38°C). At temperatures below 50°F (10°C), the reaction and “gelling” process of EUCO DIAMOND HARD is slower, so the concrete will need to remain wet with EUCO DIAMOND HARD for a longer period of time. In hot or windy conditions, the reaction may take less than the normal 30 to 60 minute period. Concrete should be pre-dampened in hot weather; apply EUCO DIAMOND HARD when all standing water has disappeared. Apply the EUCO DIAMOND HARD to the concrete surface by low pressure sprayer or by pouring directly onto the surface and distributing evenly by broom or squeegee. With soft bristle hand brooms or brushes on an auto-scrubber, work the EUCO DIAMOND HARD around the area to be treated and into the surface. The concrete must be kept wet with EUCO DIAMOND HARD for at least 30 minutes - add additional EUCO DIAMOND HARD if necessary to maintain a wet surface. As the EUCO DIAMOND HARD begins to thicken and gel underfoot, lightly spray the area with clean water to break up the thickened EUCO DIAMOND HARD and move the excess material on to the adjacent floor area next to be treated. Do not track EUCO DIAMOND HARD onto untreated concrete, as permanent footprints or tire marks can result. Continue the application process until the entire floor has been treated. When finished, completely remove all excess EUCO DIAMOND HARD from the surface. **If excess EUCO DIAMOND HARD is allowed to dry on the concrete surface, a white residue will form that can only be removed by mechanical means such as grinding or sanding. Prevent this by completely removing all excess EUCO DIAMOND HARD from the surface when application is complete.**

Floor Joints: If the floor joints are to be filled after EUCO DIAMOND HARD has been applied, they must be thoroughly cleaned before installation of joint filler. Cleaning joints by circular concrete saw or a drill equipped with a wire wheel is recommended.

Maintenance: Contact The Euclid Chemical Company for detailed maintenance procedures.

CLEAN-UP

Clean brooms, tools and all equipment and sprayers with clean water immediately after use. The residue from application and clean up process is non-toxic.

PRECAUTIONS/LIMITATIONS

- Protect containers of EUCO DIAMOND HARD from freezing. In the event of freezing, thaw and stir or agitate before use.
- EUCO DIAMOND HARD is not recommended for use as a curing compound. It does not meet the requirements of ASTM C309 or ASTM C1315.
- Protect freshly applied EUCO DIAMOND HARD from rain for at least 12 hours after application
- Although EUCO DIAMOND HARD has successfully demonstrated resistance to common chemicals in laboratory testing, the in-place performance will depend on surface porosity, application rate, chemical exposure and dwell time. If chemical resistance is of concern, a concrete sample treated with EUCO DIAMOND HARD should be constructed on the jobsite and subjected to the anticipated chemical exposure to verify in-place performance. This performance should be verified and approved by the owner prior to installation.
- Protect all adjacent surfaces including metals, glass, wood, paint or brick from contact with EUCO DIAMOND HARD. If accidentally over sprayed, wash adjacent surfaces with potable water immediately.
- Waste resulting from EUCO DIAMOND HARD application must be disposed of in accordance with local regulations.
- In all cases, consult the Safety Data Sheet before use.

WARRANTY: The Euclid Chemical Company (“Euclid”) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid’s installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid’s products for the Buyer’s intended purposes.