



EUCO DIAMOND HARD

LIQUID DENSIFIER AND SEALER FOR CONCRETE

EUCLID CHEMICAL

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 floor
- Manufacturing plants
- Distribution centres
- Polished concrete
- Commercial and retail floors

FEATURES/BENEFITS

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

TECHNICAL INFORMATION

VOC Content.....≤5 g/L

Drying Time at 21°C:

Light Foot Traffic.....4 to 6 hours

Wheel Traffic.....24 hours

Abrasion/Wear Resistance: ASTM C 779

Coefficient of Friction: ASTM F 1679

Dry: 0.81 **Wet:** 0.72

Liquid Repellency: RILEM Method 11.4

Water absorbed in 24 hours:

Untreated concrete: 5 mL

EUCO DIAMOND HARD treated concrete: 1 mL

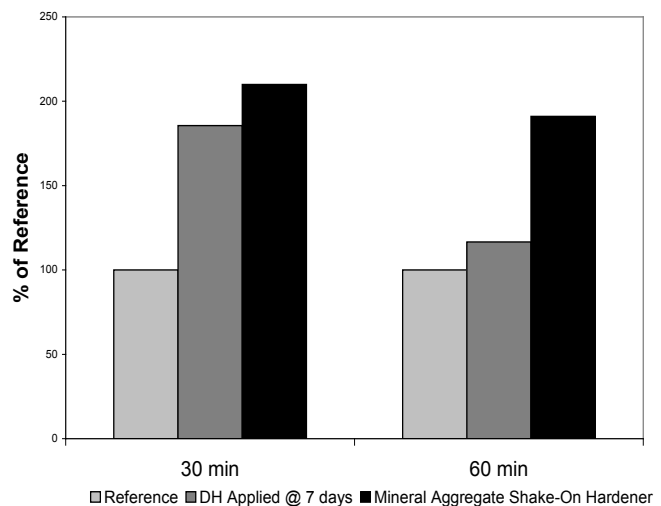
Chemical Resistance: For a complete chemical resistance chart, contact Euclid Chemical.

Appearance: **EUCO DIAMOND HARD** is a clear, water-based liquid that cures without a significant change in concrete appearance.

During placement, the colour 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 20L pails.

PENETRATING SEALERS & LIQUID DENSIFIERS

EUCO DIAMOND HARD

MASTER FORMAT #: 00 86 09

SHELF LIFE

2 years in original, unopened package

SPECIFICATIONS / COMPLIANCES

USDA Compliant and Canadian Food Inspection Agency

COVERAGE

1 litre of **EUCO DIAMOND HARD** will cover from 4.9 to 6.1m² of steel trowelled 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 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 2°C and 38°C. At temperatures below 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 C 309 or ASTM C 1315.
- 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.

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