



THE EUCLID CHEMICAL COMPANY

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EUCO DIAMOND HARD



LIQUID DENSIFIER AND SEALER



EUCO DIAMOND HARD sealer is a proprietary blend of siliconate polymers which penetrate concrete surfaces providing an increase in abrasion resistance and a reduction in the surface absorption of liquids. The product reacts with elements in the concrete surface to impart a low sheen which enhances the appearance of the concrete surface. EUCO DIAMOND HARD is water based and V.O.C. compliant. It generally dries tack free in 2 to 4 hours at 70°F (21°C) @ 50% RH.

PRIMARY APPLICATIONS

- Interior or exterior
- Warehouse floors
- Commercial floors
- Manufacturing plants
- Residential garages and basements
- Distribution centers

FEATURES/BENEFITS

- Reduces porosity and increases hardness of the concrete surface
- V.O.C. compliant
- Resists penetration of oil and many chemicals
- Minimizes tire marks and enables them to be more easily removed
- Equipment can be cleaned with water
- Can be applied to fresh, new or existing concrete
- Low sheen enhances the appearance of concrete surface
- Will not blush
- Compatible with bond breakers for tilt-up projects.

PACKAGING

EUCO DIAMOND HARD is packaged in 55 gal (208 liter) drums, 5 gal (18.9 liter) pails.

TECHNICAL INFORMATION

V.O.C.:.....0 g/l

Typical Performance

Drying Time:

Light Foot Traffic.....4-6 hours
Wheel Traffic.....24 hours

Shelf Life: 2 years in original, unopened package.

This product meets V.O.C. contents in accordance to EPA 40 CFR Part 59 Table I Subpart D for Concrete Protective Coatings with a maximum V.O.C. content of 400 g/l.

APPEARANCE

EUCO DIAMOND HARD is a clear liquid which dries transparent. After placing, the color of the concrete may initially appear darker than the surrounding concrete. As the sealer cures and dries out, the treated concrete will gradually increase in tightness with a subsequent increase in gloss. If additional immediate gloss is desired, the floor may be dry buffed with a buffing pad after the sealer has cured for 24 hours.

COVERAGE

One gallon of EUCO DIAMOND HARD will cover 200-250 ft²/gal (18.6-23.3m²/liter) of steel troweled surface depending on the porosity of that surface. When EUCO DIAMOND HARD is used as final treatment on a metallic or mineral aggregate hardened surface (ACI 302, Class 6) the coverage may be greater than indicated above. For other concrete floors (ACI 302, Class 1-5) coverage is still dependent upon the final surface texture.

DIRECTIONS FOR USE

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

New Concrete

Surface Preparation- Cure the concrete by a wet or sheet cure method in accordance with ASTM C-171, or with KUREZ DR VOX from The Euclid Chemical Company. For colored (dry shake) floors, cure with Burlene^(TM) or other suitable non-marking sheet cure. New concrete should cure seven (7) days or longer. For fast track projects, reduce the wet cure time. Allow concrete to air dry a minimum of 24 hours prior to application of EUCO DIAMOND HARD. Insufficient drying of the concrete will prevent full penetration of EUCO DIAMOND HARD, reducing its effectiveness.

Application-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 condition, the gelling process may take less than the normal 30 - 60 minute period. In extremely hot weather it is helpful to pre-dampen the concrete and apply EUCO DIAMOND HARD when all standing water has disappeared.

Apply the EUCO DIAMOND HARD by broom or low pressure sprayer. Keep the entire surface of the concrete wet with EUCO DIAMOND HARD for a minimum of 30 minutes. The material may be broomed around on the surface to ensure good coverage. As the EUCO DIAMOND HARD begins to thicken and gel (but no more than 60 minutes after initial application) broom and squeegee the excess material on to the adjacent floor area next to be treated. If necessary, lightly sprinkle water on the surface to aid in removal. Continue until the entire floor has been treated. Vacuum or squeegee to remove any excess material.

When the owner is ready to take occupancy of the building, but before equipment is placed on the floor, an additional application of EUCO DIAMOND HARD may be applied to increase the chemical and wear resistance of the concrete surface.

Soft-Cut Saw Joints-If the floor joints will be cut using the *Soft-Cut* saw method, treat the floor surface with EUCO DIAMOND HARD (including flooding the joints) after the saw cutting operation. The applicator should be sure the excess cement dust remaining after sawcutting has been removed from the concrete surface prior to application of EUCO DIAMOND HARD. After the slab has cured the appropriate number of days, the joints may then be cleaned a final time and the joint filler applied.

The Euclid Chemical Company recommends EUCO 700 control joint filler as an ideal product for interior floor control joints.

Existing, Cured Concrete

Surface Preparation-The concrete surface must be clean, dry and free of any contaminant or coating.

Application-Air temperature during application must be between 35°F and 100°F (2°C and 38 °C). For best results EUCO DIAMOND HARD should be applied and scrubbed in using mechanical scrubbers. Select the section of floor for the initial application. Apply EUCO DIAMOND HARD to the concrete surface in a continuous operation at a rate of approximately 200 ft²/gal (4.9 m²/ liter) on steel troweled surfaces.

The liquid should be scrubbed into the surface with a mechanical scrubber. In smaller areas and along the perimeter of the slab, a bristle broom may be used. The scrubbing action assists EUCO DIAMOND HARD in penetrating the surface. Keep the surface wet with EUCO DIAMOND HARD at all times during the application process. When the product thickens (but no more than 60 minutes after initial application) the surface should then be squeegeed on to the adjacent floor area next to be treated. Continue until the entire floor area has been treated. Vacuum to remove all excess liquid. The surface may be flushed with water to aid in removal of the excess material.

CLEAN-UP

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

PRECAUTIONS / LIMITATIONS

- Allow the product to dry a minimum of 4-6 hours before exposure to traffic.
- Protect EUCO DIAMOND HARD from freezing. In the event of freezing, thaw and stir or agitate before using.
- Do not leave any EUCO DIAMOND HARD residue on the treated concrete surface. Excess hardened material must be removed with a grinder.
- 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.
- Protect metals, glass, wood, paint or brick from contact with EUCO DIAMOND HARD. If accidentally oversprayed, wash surface with potable water immediately.
- Air temperature during application of EUCO DIAMOND HARD must be between 35°F and 100°F (2°C and 38°C).



Diamond Hard-10.05

WARRANTY: The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for six (6) months 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.