# HARBETON

Chemically reactive fluosilicate based concrete hardener and dustproofer.

## HOW IT WORKS

Harbeton reacts with free limes present in concrete. The result of this chemical reaction permanently hardens, densifies and dustproofs concrete and imparts chemical resistance to a broad spectrum of chemical compounds. Inclusion of scientifically balanced surfactants insure maximum penetration and performance.

#### **APPLICATIONS**

- Use on ACI 302-69 Class I through 4 concrete floors.
- Use on new and existing concrete floors.
- Use to dustproof vertical concrete and concrete floors where dust formation would pose an appearance problem or a contamination problem with building contents, equipment and/or occupants.
- Use to improve bonding strengths of adhesives, toppings, plaster and paints.
- Ideal for use in manufacturing plants, basements, auto dealerships, stores, food processing plants, bottling plants, auditoriums, hospitals, schools, parking garages, hangars, concrete tanks and vessels.

#### ADVANTAGES

- Hardens and increases the abrasion, impact and wear resistance of concrete floors where high volumes of pedestrian and/or vehicular traffic are expected.
- Provides permanent protection to the depth of penetration
- Reduces the porosity of concrete surfaces, providing chemical resistance to most organic acids, alkalis, salts, foods, fats, oils, greases and solvents and sufficient resistance to inorganic acids to permit successful cleanup of spillage.
- Densifies, strengthens, seals and dustproofs soft or dusty concrete floors.
- Provides an improved surface for mechanical bonding and leaves no residual film which could impair adhesion of toppings, adhesives, sealers or paints when properly applied.
- Allows treated floors to breathe and avoids the characteristic sweating common to floors treated with membrane dustproofers and hardeners.
- Also available in a Concentrate version (Harbeton Concentrate) which requires dilution.
- Meets all federal and state VOC requirements.

Meets or exceeds all performance specifications for liquid chemical hardeners, including those for silicate and fluosilicate types established by the U.S. Army Corps of Engineers, Department of Navy, Veterans Administration, and G.S.A.

# A PRECAUTIONS A

- Do not use on concrete less than 14 days old.
- Do not use on latex or epoxy polymer modified concrete.
- Do not use on concrete previously treated with wax or resin curing, sealing and bondbreaker compounds which can interfere with the normal penetration of Harbeton without their prior removal by chemical or mechanical means.

## **USE INSTRUCTIONS**

- Request current product literature, labels and material safety data sheets from manufacturer and read thoroughly before product use.
- Site environmental conditions, substrate conditions and construction have a major effect on product selection, application methods, procedures and rates, appearance and performance. Product literature provides general information applicable to some conditions. However, an adequate site test application by the purchaser or installer in advance of field scale use is mandatory (irrespective of any other verbal or written representations) to verify that product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- Surfaces to be treated must be at least 14 days old and clean, dry, and free from paint, residual wax, resin curing compounds, bondbreakers and sealers.
- Typical application rate is 150 sf/gal (3.68 sm/L). Coverage will vary with the porosity of the concrete being treated.
- Apply with coarse spray, mop or by flood and squeegee.
- Both Harbeton and Harbeton Concentrate must be diluted with water prior to use. Harbeton Concentrate is shipped in short-filled containers and requires dilution by filling the containers full with water and mixed well to create Harbeton. Use the original container or a plastic mixing container for diluting and mixing. Mix well before use.
- Best results are obtained with three saturation applications. The first application should be 1 part Harbeton to 2 parts water. The second application should

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chemical solutions to concrete problems

be 1 part Harbeton to 1 part water. The third application should be 2 parts Harbeton to 1 part water.

- Allow treated areas to dry between applications except for applications to colored or white concrete or terrazzo, which must not be allowed to dry between applications or crystal formation may occur and detract from appearance.
- If multiple applications are not possible, a single saturation application of 1 part Harbeton to 1 part water may be used though effectiveness may be reduced.
- Mop up puddles and excesses.
- Following final application and while surface is still wet, treated area should be flushed with water, scrubbed and mopped dry.

#### **TECHNICAL DATA**

Color	Colorless
Bulk Density	9.26 lbs./gal. (1110 g/L)
Clarity	Hazy
Odor	None
Flammability	Non flammable
VOC, ASTM D2369	0 g/L
VP	17.0 mmHg @ 20° C

#### PACKAGING

Product is packaged in 5 gal (19 L) pails and 55 gal (208 L) drums.

#### SHELF LIFE

Shelf life is one year. Use before the "USE BY" date stated on product packaging.

### HANDLING

Harbeton is toxic. Avoid ingestion, skin and eye contact, and inhalation of spray mist. Applicators should wear protective plastic or rubber garments. Read Material Safety Data Sheet (MSDS) prior to using. Harbeton may corrode metals and etch glass and paint. Flush contaminated areas with water and dry.

#### STORAGE

Store in dry area away from excessive heat, sparks and open flame. Do not expose product to freezing temperatures. Freezing may render product unsuitable for further use.

## AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, NOX-CRETE Products Group maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, call 800-669-2738 or 402-341-2080.

#### LIMITED WARRANTY

#### NOTICE-READ CAREFULLY

#### CONDITIONS OF SALE

NOX-CRETE offers this product for sale subject to, and Buyer and all users are deemed to have accepted, the following conditions of sale and limited warranty which may only be varied by written agreement of a duly authorized corporate officer of NOX-CRETE. No other representative of or for NOX-CRETE is authorized to grant any warranty or to waive limitation of liability set forth below.

#### WARRANTY LIMITATION

NOX-CRETE warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, NOX-CRETE will replace the defective product with new product without charge to the purchaser.

NOX-CRETE makes NO OTHER WARRANTY, either express or implied, concerning this product. There is NO WARRANTY OF MERCHANTABILITY. In no case shall NOX-CRETE be liable for special, indirect or consequential damages resulting from the use or handling of the product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which damages are claimed.

#### INHERENT RISKS

NOX-CRETE MAKES NO WARRANTY WITH RESPECT TO THE PERFORMANCE OF THE PRODUCT AFTER IT IS APPLIED BY THE PURCHASER, AND PURCHASER ASSUMES ALL RISKS ASSOCIATED WITH THE USE OR APPLICATION OF THE PRODUCT.

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