

## DUO-SHIELD

Solvent-based, transparent, glossy, acrylic polymer and silane type combination water repellent and decorative sealer for new or existing horizontal exterior concrete surfaces.

VOLATILE ORGANIC COMPOUND (VOC) REGULATORY COMPLIANCE



### HOW IT WORKS

DUO-SHIELD combines a deep-penetrating silane and a low molecular weight acrylic resin polymer to seal concrete, repel water and provide stain protection all in one product.

### APPLICATIONS

- ◆ Use on plain grey concrete surfaces such as driveways as well as decorative surfaces such as stamped concrete.
- ◆ Use to seal new or existing concrete surfaces.
- ◆ Seal, waterproof and protect horizontal concrete surfaces with only one product.
- ◆ Use on patios, pool decks and driveways to protect against food, grease, oil and dirt staining.

### ADVANTAGES

- ◆ Protects concrete surfaces against the damaging effects of deicing salts, acid rain and staining.
- ◆ Minimizes spalling due to moisture absorption and freeze/thaw related damage.
- ◆ Prevents unsightly stains caused by absorption of dirt, oil and grease.
- ◆ Sealed surface makes contaminants easy to clean simply by wiping away or by using a mild detergent and scrub brush.
- ◆ Gives decorative surfaces like stamped concrete a "wet look" and enhances the natural colors.
- ◆ Resists ultra-violet oxidation and yellowing.
- ◆ Offers excellent water vapor permeability and resistance to blistering.
- ◆ Dries rapidly and offers excellent re-coatability characteristics.
- ◆ VOC compliant for use anywhere in North America except CA and UT.
- ◆ Compliant with USDA requirements for incidental food contact.

### ▲ PRECAUTIONS ▲

- ◆ Due to the extremely low flash point, DUO-SHIELD is only recommended for exterior applications and is NOT recommended for interior or enclosed applications.
- ◆ Acid stained floors must be neutralized before applying

DUO-SHIELD. Wash the floor with a sodium hydroxide solution, thoroughly rinse with water and allow to dry. Use litmus paper to verify that the floor has a pH greater than 7 before applying DUO-SHIELD.

- ◆ Do not apply where moisture could contact the underside of applied DUO-SHIELD.
- ◆ Do not use on concrete slabs with inadequately drained subgrade or treated surfaces to be covered with concrete or plaster.
- ◆ Coating delamination (blistering) may occur if applied prior to allowing all surface bleed water to fully evaporate. A moisture saturated subgrade or a moisture barrier placed beneath the slab to be cured and/or sealed may increase the risk of coating delamination.
- ◆ Do not use with other floor sealers, treatments, bondbreakers or adhesives without prior site test to determine compatibility and adhesion.
- ◆ Any variations in concrete surface density may be highlighted by surface mottling after product application. Make test application to determine performance and appearance acceptability.
- ◆ Do not use around sparks or open flame. Provide adequate ventilation.
- ◆ Treated surfaces may be slippery prior to drying and when wet with water or liquids after drying.
- ◆ May damage vegetation or painted surfaces with contact.
- ◆ Coated surfaces will ultimately oxidize (chalk) in time, necessitating reapplication.
- ◆ Not recommended for application to frozen concrete surfaces or when ambient temperatures are below 40° F (4° C) and/or are expected to drop below 40 F (4° C) within 12 hours following application.
- ◆ Do not apply DUO-SHIELD to concrete if substrate temperatures are below 40° F (4° C) or above 85° F (29° C). Best results are obtained when DUO-SHIELD is applied during the morning or evening hours and not in direct sunlight. Application of DUO-SHIELD in direct sunlight and under extremely hot conditions can result in solvent bubbling or blistering.
- ◆ Avoid applying DUO-SHIELD in windy conditions, which can interfere with product performance and appearance.
- ◆ Avoid over-application. Apply one to two light coats. Over application may prohibit vapor transmission and lead to blistering and delamination of the sealer.

DUO-SHIELD

Water Repellent and Sealer



chemical solutions to concrete problems

## USE INSTRUCTIONS

- ◆ Request current product literature, labels and safety data sheets from manufacturer and read thoroughly before product use.
- ◆ Site environmental conditions, substrate conditions and concrete mix designs 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.
- ◆ Product can be applied with a hand pump, low pressure sprayer, roller applicator or brush. Use a .017 or .019 spray tip for airless spray application. Use an 8006 LP spray nozzle for application with a hand pump, lower pressure sprayer. For roller application, use a roller applicator equipped with a 3/8 (10mm) nap cover.
- ◆ Do not thin or dilute.
- ◆ Application rates vary with substrate conditions. Approximate rate for sealing is 300 sf / gal. (7.4 sm / L) per application.
- ◆ Remove all dirt, oil, grease, paint or foreign cure residue with Nox-Crete's BIO-CLEAN and clean with a solution of trisodium phosphate detergent and water. Rinse thoroughly with water and allow to dry a minimum of 48 hours prior to application of product.
- ◆ If necessary, remove existing sealers with Nox-Crete's DECO-STRIP or DECO-PEEL.
- ◆ Apply to the point of saturation and appearance of continuous surface film.
- ◆ Apply all subsequent coat(s) at right angles to previous coat when dry.

## MAINTENANCE

- ◆ Wipe up all chemical, solvent or petroleum spills as soon as possible.

- ◆ Remove dirt and debris by sweeping.
- ◆ Wash periodically with low pressure water and scrub brush to help maintain surface luster.
- ◆ Clean damaged coating areas promptly and recoat.

## TECHNICAL DATA

<b>Bulk Density</b>	7.36 lbs / gal. (.88 kg / L)
<b>Color</b>	Clear Liquid
<b>Odor</b>	Organic Solvent
<b>Flash Point</b>	> 40°F (4°C)
<b>Freeze Point</b>	-40° F (>-40° C)
<b>VOC</b>	<400 g / L

## PACKAGING

Packaged in 1 gal (3.8 L) jugs, 5 gal (19 L) and 55 gal (208 L) drums.

## SHELF LIFE

Shelf life is two years. Use before the "USE BY" date stated on product packaging.

## HANDLING/STORAGE

Store in a dry location within a temperature range between 40° F (4° C) and 100° F (38° C).

## AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, NOX-CRETE INC. 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.