

NCA 40% SILANE VOC CA

WATER REPELLENT PENETRATING SEALER

BEST PROTECTION

DESCRIPTION

NCA 40% Silane VOC CA is a premium high performance, breathable, efficient solvent base clear penetrating water repellent sealer. Surfaces treated with NCA 40% Silane VOC CA have a totally natural appearance. When properly applied the treatment does not produce a surface build up, darkening or other effect on the natural color or texture of the surface. The material's small molecular structure allows for maximum penetration into new concrete (14 day minimum) or existing concrete and masonry surfaces.

NCA 40% Silane VOC CA stops the intrusion of water, salts, deicer chemicals, and acid rain, which often result in efflorescence, mildew growth, corrosion, scaling, spalling, surface erosion, and other costly damage to hard surfaces.

NCA 40% Silane VOC CA penetrates into the pores and capillaries of the cement based materials reacting with the moisture and chemicals in the substrate, polymerizing and sealing the pores, which prevents water and chloride ION penetration. Treatment of reinforced concrete reduces surface erosion and corrosion of rebar caused by attack of water and water borne salts and alkalis.

PRE-INSTALLATION NOTES

Precaution: NCA 40% Silane VOC CA contains blended solvent and should be handled accordingly. Do not use near fire or extreme heat and provide good ventilation to avoid buildup of solvent fumes. Applicators should wear NIOSH/MSHA approved respirators. When applying to the exteriors of occupied buildings all exterior air conditioning vents should be covered during application and air-handling equipment should be turned off during application to avoid solvent odors within the building.

- A test application is necessary on each surface to be treated to ensure compatibility and desired water repellency. Test areas are also useful in determining final application rate and procedures.
- If the material in the test area does not fully penetrate due to coatings or inadequately cleaned surface, use one of **Vexcon's cleaners and stain removal products** to properly clean the surface prior to application
- If a tacky residue remains after 24 hrs, the application rate must be modified. Material which remains tacky on the surface can usually be removed by washing with water or a vinegar solution.
- Tests should be applied using the same equipment and techniques planned for job application.
- Overspray can be removed with **Certi-Vex Equipment Cleaner** before the solution has dried. Protect non-porous surfaces.

SURFACE PREPARATION

- All caulking, patching and joint sealants should be installed and fully cured prior to application. Concrete should be properly cured, see Curing Recommendations section.
- All surfaces must be cleaned free of dust, dirt, surface materials, previous coatings and contaminants.
- New concrete normally does not require etching. However, slick trowel finished concrete that has become heavily contaminated with surface dirt, tire marks, oil, etc., during construction may require thorough cleaning and a mild etch using **Certi-Vex Etch & Efflorescence Remover** for best performance.
- Older concrete surfaces should be power washed with high-pressure water and **StarSeal® Brick & Masonry Cleaner** to assure removal of surface dirt, oil and other contaminants; use **Certi-Vex Concrete Stripper** to remove coatings, adhesives and floor waxes.
- To determine that the concrete is penetrable perform a water absorbency test by applying water to a representative portion of the prepared surface. A properly prepared surface when dry will immediately absorb clean water without any surface beading effects. If required use Certi-Vex Etch & Efflorescence Remover to improve sealer penetration.
- Surfaces to be treated may be damp but should be absorbent to assure good penetration.
- Application to still damp surfaces is acceptable however free standing water must be removed.

CURING RECOMMENDATIONS

- Concrete can be cured with **Certi-Vex Envio Cure**, an emulsion resin cure, which will dissipate. Allow to dissipate or remove with Certi-Vex Concrete Stripper.
- Wet Cure

APPLICATION

- Do not dilute.
- Apply with low-pressure (20-PSI) airless industrial spray equipment. Sprayer should be fitted with solvent resistant hoses and gaskets.
- If using brushes or rollers care should be taken to ensure that enough solution is applied.
- Treated surfaces should be protected from rain and foot traffic for 4 hours following application.
- Protect from vehicular traffic for 4 hours or less until the surface is dry.

HORIZONTAL SURFACES

- Apply in a single saturating application with sufficient material applied so the surface remains wet for a few minutes before penetration into the surface.
- Surface residues, pools and puddles should be broomed or brushed out until they completely penetrate into the surface.

VERTICAL SURFACES

- NCA 40% Silane VOC CA should be applied and absorbed on the substrate to the specified coverage rate.
- In the case of extremely dense, mirror finish architectural concrete and similar surfaces, it may be necessary to restrict the amount of material by first applying a light mist coat by the procedure listed below in order to prevent surface darkening.
- Allow the mist coat to penetrate the surface (approximately 3-5 minutes) and apply in the same saturation manner.
- Apply in a flooding application, from the bottom up with sufficient material applied to provide a 6" to 8" run down below the contact point of the new spray pattern with the surface.

SPECIFICATION/COMPLIANCE

- Many state departments of transportation
- VOC - <250grams/liter or <2.08 #/gal
- Meets:
 - US EPA - Waterproofing Sealers and Treatments
 - OTC, LADCO/MRPO, CEPA/EC - Waterproofing Concrete Masonry Sealer
 - CARB, SCAQMD - Rule 1113 - Reactive Penetrating Sealer
- NCHRP 244 Series II & IV
 - Water Loss Reduction, coated samples, 14 days at 50% RH: 86.7%
 - Water Loss Reduction, coated samples, 21 days in 15% NaCl: 93.2%, UV 92.6%
 - Reduction of Chloride Penetration into concrete, (0-1" Coated 95.3%, - UV 94.6%), (0-2" Coated 94.6%, - UV 92.6%)
 - Reduces water absorption - (ASTM C67 and ASTM C642) by greater than 90%
- ASTM C672 Scale rating -100 freeze thaw cycles - 0 (no scaling)
- Penetration (1 application) 0.150 - 0.26", depending on substrates
- ASTM E96 - Water Vapor Permeability 95%
- ASTM D2047 - Coefficient of friction 0.84 average - minimum required 0.50
- CSI reference: 07 19 16

PHYSICAL PROPERTIES

- Color Clear
 - Dry time <4 hours
 - Carrier Aliphatic & Acetone
 - Total solids and active ingredients by wt.>40%
- Dry times are based upon 68-77°F (20-25°C). Lower temperatures and the relative humidity will extend dry times.

SPECIAL NOTES

- The product should be stored in sealed containers and kept away from extreme heat.
- Do not apply unless substrate and ambient temperatures are 20°F (6°C) and rising at installation time and remain above 40°F (4°C) for at least 4 hours after installation.
- Do not apply above 90°F (32°C) or below 20°F (6°C).
- Do not apply in rain or when rain is expected within 4 hours after application.
- Line stripping can be done after application of sealer. Contact Vexcon Technical Service for additional information
- Shelf Life: If properly stored in its original sealed container, 3 years from date of manufacture. Rotate your stock.
- For use by experienced contractors.
- Storage/ Handling: Store in tightly sealed original factory container. Keep from freezing and exposure to moisture. Store at room temperature prior to use. Care should be taken to keep dirt, water and contaminants away from the opening of containers.
- Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- Proper application of Vexcon material is the responsibility of the installer or user. Telephone consultation and/or field visits by Vexcon personnel are for the sole purpose of making technical recommendations only, and not for providing quality control or supervision on location.
- Warranty: All products are sold subject to Vexcon's published materials Limited Warranty and Terms and Conditions of Sale which are available at vexcon.com.

COVERAGE RATES/ESTIMATING

The following is a guide for estimating material requirements. Actual coverage rates can vary based on substrate or transportation authority requirements.

Horizontal

Broom Finish Concrete	125 - 140 sq.ft/gal.(3.1-3.5m ² /L)
Smooth Hard Troweled Concrete	200 - 400 sq.ft/gal. (6.5-11m ² /L)
Bridge Decks/Ramps	125 - 250 sq.ft/gal. (3.1-8.1 m ² /L)
Resealing Bridge Decks/Ramps	250 - 300 sq.ft/gal. (8.1-9.2 m ² /L)
Concrete Pavers	120 - 140 sq.ft/gal. (3.1-3.5m ² /L)
Brick	200 - 250 sq.ft/gal. (6.5m ² /L)

Vertical

CIP or Precast Concrete	150 - 200 sq.ft./gal (3.5-5m ² /L)
Un-Painted Stucco	95 - 140 sq.f t./gal (2.4-3.5m ² /L)
Brick	200 - 400 sq.ft/gal. (6.5-11m ² /L)
Smooth Faced Block	200 - 400 sq.ft/gal. (6.5-11m ² /L)

- Use only with adequate ventilation.
 - Use of gloves, goggles and other protective clothing is advised when using this product.
 - If swallowed, do not induce vomiting.
 - Use of respirators is advised when using in confined areas.
- NCA SDS is an integral part of the safety and application of our product. A short synopsis is provided in this product data sheet. Before using this NCA product it is advisable to obtain a copy of the SDS from your distributor or at vexcon.com

CONTACT US @

Additional product information, technical assistance and customer service is available by contacting **National Concrete Accessories** directly or our distributors.

www.nca.ca

sales@nca.ca

Voice: 888.777.9272

Fax: 416.242.3496



172 Bethridge Road, TORONTO, ON M9W 1N3
 TEL: (416) 245-4720 FAX: (416) 242-2727
 TOLL FREE: (888) 777-9272 www.nca.ca