



VEXCON
CHEMICALS, INC.

Protecting and improving concrete since 1974

7240 State Road, Philadelphia, PA 19135
215-332-7709 or 888-839-2661
Fax: 215-332-9997

vexcon.com

CERTI-VEX[®] GUARD CHEMICALLY ACTIVE CONCRETE STAIN (CACS)

ONE STEP CURE AND COLORED PENETRATING WATER REPELLENT SEALER
STAIN PROTECTION

DESCRIPTION

Certi-Vex Guard CACS is a colored, ready to use breathable one step penetrating water repellent cure and sealer that provides maximum long term protection and a decorative appearance to concrete and masonry surfaces. Water and dissolved salts bead after 24 hours, Chloride Ion intrusion is reduced, protects against staining and damage caused by water, salts, deicer chemicals and acids.

Applied on new or existing horizontal and vertical concrete, it immediately penetrates the pores and capillaries of the concrete reacting with the alkali and moisture to form a hydrophobic gel in the pores and a water retentive ASTM colored film on the surface which seals the surface.

For new concrete this one step product will cure and seal the concrete eliminating the costly removal of curing compounds and time consuming water curing which gets the job completed fast.

BENEFITS

- Easy one-step ready to use application
- Available in 15 standard and custom colors. See Vexcon Color Systems Chart
- Cures fresh concrete
- Advanced stain protection
- An effective chloride screen
- Especially suitable for alkaline concrete surfaces
- Prolongs the surface life and prevents damage from within by maintaining vapor permeability of concrete
- Horizontal and Vertical surfaces
- Quick formation of surface repellency and chemical resistance
- Non-yellowing
- Deep penetration for maximum protection
- Seals and hardens surface reducing clean up and maintenance costs
- Vexcon breathable technology
- Excellent color retention (non-fading)

SPECIFICATION/COMPLIANCE

- VOC - 385 gr./liter or 3.21#/gal.
Meets:
 - USEPA AIM-Waterproofing Sealers and Treatments
 - OTC-Waterproofing Concrete/Masonry Sealers
- Chloride Ion Reduction using NCHRP 244 series IV and Moisture Vapor Transmission
- T490 penetrating concrete sealer
- ASTM 1315, Type 1, Class A.
- ASTM C 309, Type 1, Class A&B
- Federal specification TT-C-800-A (GSA-FSS) type 1
- USDA and ADA Non-slip requirements
- CSI Reference: 03, 35, 00, 03 39 00, 07 19 13, 09 97 23

APPLICATION

The concrete surface must be properly repaired, structurally sound and cleaned. Use Vexcon's surface prep and cleaning products to properly clean the surface prior to application.

- Prior to application a test area must be performed to determine proper application rate and techniques and required surface preparation.
- Application may be done with a short 1/4" nap roller, brush or low-pressure industrial sprayer with neoprene fitting.
- Thoroughly mix before each use using a jiffy type mixer. Use a roller pan to take off excess product. Do not dip and roll or pour and spread. Mechanically shaking is not adequate.
- Do not dilute. Certi-Vex Guard CACS should be applied in a single saturating application with sufficient material applied so that the surface remains wet for a few minutes before penetration into the concrete.
- Various staining effects can be obtained by rag wiping, texture brushing, roller stippling and other decorative techniques.
- Same lot numbers should be used throughout the project. If lot numbers differ, box mix prior to use.
- A uniform protective color finish can be obtained by simply leaving the final coat untouched after application.

CURING, SEALING AND STAINING NEW CONCRETE

- The concrete should be cured with a first coat of Certi-Vex[®] Guard applied 1 hour after gauging water has been absorbed following the final toweling in accordance with the coverage rates listed herein, see Coverage Section.
- Do not apply over free standing water.
- A second coat should be applied 72 hours later, at a rate of 250-300 sq.ft./gal. to provide for maximum chloride ion protection and to even out the color and achieve a uniform appearance.
- If a liquid membrane curing compound has been used to cure the concrete, the surface can be water blasted to remove the coating and any dirt, dust, contaminants or use **Certi-Vex Concrete Stripper** to remove old sealers, grease, dirt and curing compounds. If the concrete has been water cured, the concrete must be free of any dirt, dust and contaminants and water blasting is recommended prior to the application.
- **Certi-Vex Concrete Etch & Efflorescence Remover** can be used to remove laitance and salts and **Certi-Vex Super Degreaser & Cleaner** to remove dirt and oil.
- Surface residues, pools and puddles should be evened out until they completely penetrate into the surface.

APPLICATION AREAS

Ideal for infrastructure, transportation, commercial and residential applications and any new and existing concrete that requires a colored decorative high performing finish with the long term protection of a water repellent sealer and a glossy high performance stain resistant film. It may be used as a water repellent on vertical surfaces, on cast in place and pre-cast concrete or concrete block.

SEALING AND STAINING EXISTING CONCRETE

- Certi-Vex Guard CACS can be used on untreated concrete that has been cured with Certi-Vex Guard CACS, Certi-Vex Guard, see data sheet # PS104, or treated with **Penseal** or **Powerseal** protective treatments.
- Use one of **Vexcon's cleaners and stain removal products** to properly clean the surface prior to application. After thorough cleaning remove all water and residue and inspect the surface.
- To determine that the concrete is penetrable perform a water absorbency test by applying water to a representative portion of the prepared concrete floor. 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 penetration.
- Application to still damp surfaces is acceptable however free standing water must be removed.
- The concrete should be coated with Certi-Vex Guard CACS at coverage rate described below and allowed to completely penetrate the surface with no puddles, ponding or wet spots.
- On vertical surfaces the material should be applied to lower surfaces moving upwards to allow a downward flow of excess material

MAINTENANCE

Spills should be removed promptly and cleaned with Certi-Vex Super Degreaser. Floors should be cleaned regularly. Periodic reapplication may be required as the sealer wears.

COVERAGE RATES/ESTIMATING

Porosity and texture of the surface will affect the amount of material necessary for effective treatment. The following is a guide for estimating total material requirements. Always perform a test area to determine proper application rate.

	<u>First Coat</u>	<u>Second Coat</u>
Porous Concrete	200-400 sq.ft./gal.	200-400 sq.ft./gal.
Dense Concrete	500-600 sq.ft./gal.	500-600 sq.ft./gal.
Pre-Cast or CIP Block:		
Smooth-faced	130-150 sq.ft./gal	130-150 sq.ft./gal.
Split-faced	100 sq.ft./gal	100 sq.ft./gal.

SPECIAL NOTES

- The product should be stored in sealed containers and kept away from extreme heat
- Protect application area from rain for 4 hours
- May cause bleeding on bituminous surfaces
- Clear version available, **Certi-Vex Guard Clear**
- Not gasoline resistant. Use Vexcon **Powercoat Epoxy LD**
- Equipment clean up: Use **Certi-Vex Equipment Cleaner**
- Can apply when surface temperatures are 20° F - 85° F. When below or above these ranges review Vexcon's Cold and Hot Weather Application Guides
- Shelf Life: If properly stored in its original sealed container, 3 years from date of manufacture. Rotate your stock
- For use by experienced applicators

VITAL STATISTICS

- Flash Point (TCC): 4.4 ° C (40° F)
- Boiling Point (706 mmHg): 133° F (56°C)
- Autoignition Temp: 518° C (964° F)
- Extinguishing Media: Foam, dry chemical, CO2, Water Fog.

PACKAGING

Certi-Vex Guard CACS is available in 50-gallon drums and 5-gallon pails. Contact Vexcon to discuss your customized packaging requirements.

PHYSICAL PROPERTIES/DRY TIMES

Tack Free :	4 hours
Foot Traffic:	Overnight
Vehicle Traffic:	72 hours

HEALTH AND SAFETY

CAUTION FLAMMABLE LIQUID

- Resin solution, flammable liquid, red label
- Use of respirators is mandatory when using this product in confined areas.
- Use only with adequate ventilation.
- If swallowed, do not induce vomiting.
- Use of gloves, goggles and other protective clothing is advised when using this product.

Vexcon MSDS #PS107 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 Vexcon product it is advisable to obtain a copy of the MSDS from your distributor or by contacting Vexcon Chemicals.

PERFORMANCE DATA

Water absorption after soaking in 15% sodium chloride solution:

		<u>WT/GAIN %</u>	
		<u>"A"</u>	<u>"B"</u>
CERTI-VEX® GUARD CACS 1 coat @ 125 sq.ft./gal			
Average of 5 blocks:		1.09%	
Commercial Available Siloxane			
1 coat @ 125 sq.ft./gal			
Average of 5 blocks:		.95%	
Control Uncoated average of 5 blocks		8.2%	
% Reduction in water absorption:	75%	86.7%	88.4
Reported in literature:			80%
% Reduction of Chloride Ion Content:		75%	85.7%
	70.3%		
Reported in literature:			78%
Water vapor transmission:		100%	104%
	116%		
Reported in literature:			118%
A=Certi-Vex Guard cacs			
B=Common Siloxane			

CHEMICAL RESISTANCE

Resistant to most common acids, salts and alakai. See Certi-Vex Guard CACS Chemical Resistant Chart, data sheet # S107A.

CONTACT US @

Additional product information, technical assistance and customer service is available by contacting Vexcon Chemicals directly or our distributors.

- vexcon.com
- technicalservice@vexcon.com
- customerservice@vexcon.com
- Sales@vexcon.com
- Voice: 888.839.2661
- Fax: 215.332.9997

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