VEXCON CHEMICALS, INC.
Performance Construction Chemicals

CERTI-VEX® GUARD CLEAR

ONE STEP CURE AND PENETRATING WATER REPELLENT SEALER
ASTM C-1315 TYPE 1 CLASS A • NCHRP-244
VOC Content gr./liter: 671 or #/gal. 5.60 – Cure and Seal

DESCRIPTION

CERTI-VEX GUARD is a clear vinyl toluene acrylic silane polymer blend that is applied to new or existing 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 film on the surface.

This membrane, which meets ASTM curing requirements and the Chloride Ion Penetration requirements of NCHRP 244, forms a glossy film that restricts moisture loss allowing the concrete to reach maximum hardness and reduces chloride migration, stopping intrusion of water, salts, deicer chemicals and acids which result in costly damage to concrete. The coating will bead water after 24 hours.

This innovative one-step product eliminates the costly removal of curing compounds and time consuming water curing. The final film has excellent moisture vapor transmission rates while excluding water and chloride ion penetration.

APPLICATION

Thoroughly mix before using or placing in the reservoir of the spray equipment. The product is supplied ready-to-use, do not dilute with water or solvents. Apply by low-pressure sprayer with neoprene fitting; if not available use a brush or roller. The sprayer must be clean, dry and free of solvents.

Certi-Vex Guard 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. Surface residues, pools and puddles should be broomed out thoroughly until they completely penetrate into the surface.When applying to vertical surfaces: Contact Vexcon for further information.

CURING AND SEALING NEW CONCRETE

Apply Certi-Vex Guard three hours after the concrete has received final finishing and all gauging water has been absorbed. See Coverage Section for first coat application rate.

SEALING EXISTING CONCRETE

Apply Certi-Vex Guard to surfaces that are structurally sound and cleaned of all dirt, oil, grease and foreign matter. See Coverage Section for first coat application rate. Use **Certi-Vex® Concrete Stripper** to remove old sealers, epoxies, adhesives, curing compounds and floor waxes. Flush with water. Remove all water and residue and inspect the surface. Prior to application a test area must be performed to determine proper application rate and required surface preparation. 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. Apply as directed at the proper coverage rate. See Coverage Section.

SECOND COAT

A second coat is recommended if the initial first coat is damaged or a high gloss protective top coat is desired. All caulking, patching and joint sealants should be installed in accordance with ACI standard specifications. Before applying a second coat, the concrete surface should be cleaned free of dust, surface dirt and contaminants. Concrete that has become heavily contaminated with surface dirt, tire marks, oil, etc., during construction may require thorough cleaning for best performance of the second coat. See Coverage Section.

APPLICATION AREAS

Ideal as a cure or seal on new or existing parking structures, bridge decks, athletic stadiums, engineered concrete structures and all new concrete that requires a glossy water repellent film. It may be used as a water repellent on vertical surfaces, on cast in place concrete or concrete block.

BENEFITS

- An effective chloride screen.
- Deep penetration-no color change to the natural appearance of new concrete. Existing concrete will slightly darken.
- Especially suitable for alkaline concrete surfaces.
- Prolongs the surface life and prevents damage from within by maintaining vapor permeability of concrete.
- Quick formation of surface repellency and chemical resistance.
- Prevents loss of silane ingredients due to evaporation.
- UV resistant - will not yellow
- Cures new concrete
- Breathable
- Cost saving
- Low Maintenance

SPECIFICATIONS/COMPLIANCE

The product has been tested to meet the requirements of:

- ASTM C-1315 Type 1 Class A
- NCHRP244 Chloride Ion
- Reduction using NCHRP 244 series IV and Moisture Vapor Transmission.
- Meets USDA and ADA Non-slip requirements.
- VOC Compliant: gr./liter: 671 or #/gal. 5.60 – Cure and Seal

MAINTENANCE

Spills should be removed promptly and cleaned with a high quality commercial detergent. Floors should be cleaned regularly. Periodic reapplication may be required as the sealer wears off.

COVERAGE

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

First Coat: 125 sq.ft/gal (3.1 m^2/L)
Second Coat/Sealing Coat: 300 sq.ft/gal (7.5 m^2/L)

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 show rubber burns
- May cause bleeding on bituminous surfaces
- May cause mottling of colored surfaces
- Not gasoline resistant. Use Vexcon **Powercoat® GR**
- Equipment clean up: Use **Certi-Vex® Equipment Cleaner**
- Do not topcoat
- If properly stored in its original sealed container, three years from date of manufacture. Rotate your stock.
- For use by professional applicators

HEALTH AND SAFETY

- 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.

Precaution: Certi-Vex Guard 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. Clothing which may become contaminated with Certi-Vex Guard should be changed as quickly as possible. Adjoining glass, metal and painted surfaces should be protected from over spray and splash of Certi-Vex Guard. Inadvertent splashes should be removed using Certi-Vex Equipment Cleaner before the solution has dried on the surface.Vexcon MSDS #PS104 is an integral part of the safety and application of our product. A short synopsis is provided in this product data sheet. Before using product, it is advisable to obtain a copy of the MSDS, #PS104, from your distributor or by contacting Vexcon Chemicals.

PACKAGING

Certi-Vex Guard is available in 55-gallon drums and 5-gallon pails. Contact Vexcon to discuss your customized packaging requirements.

VITAL STATISTICS

- Flash Point (TCC): 106º F (41ºC)
- Boiling Point (706 mmHg): 310-403^0 F (154-207ºC)
- Autoignition Temp: Above 473º F (245ºC)
- Extinguishing Media: Foams, Dry Chemical, $C0_2$, Water may be used to reduce the rate of burning and for cooling containers.

PHYSICAL PROPERTIES

- Color: Crystal Clear
- Dry Time: <4 hours
- Wt/Gallon: 7.03#
- Solids: 28%

TEST RESULTS - CTL PROJECT NO.: 105869

Final results for Certi-Vex Guard submitted for testing for Utah Department of Transportation Concrete Sealer Freeze/Thaw Weight Loss.

PASS 3.1% WT. LOSS VS. 6.0% ALLOWED

Weight Monitoring of Specimens Subjected to Utah DOT Concrete Sealer Freeze/Thaw Tests Oven Dry Weights in Grams After Indicated Freeze/Thaw Cycles

Product Identification	Specimen #	0	304 Cycles
Certi-Vex® Guard #73F16	A	276.7	268.8
	B	273.6	264.5
	C	274.0	265.3
Controls	A	272.4	Failed**
	B	274.6	Failed**
	C	275.5	Failed**

Notes:
** Controls failed and turned into rubble after 118 F/T cycles. After 47 cycles, controls were in poor condition.

PERFORMANCE DATA**

Water absorption after soaking in 15% sodium chloride solution:14 days

WT/GAIN %	CERTI-VEX GUARD	Commercial Siloxane Control
1 coat @ 125 sq.ft. /gal		
Average of 5 blocks:	1.09%	.95%
8.2%		

	Minimum Req.	GUARD	SILOXANE
% Reduction in water absorption:	75%	86.7%	88.4
% Reduction of Chloride Ion Content:		75%	85.7%
70.3%			
Water vapor transmission:	100%	104%	116%

CONTACT US @

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

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