

CEMTEC CONGUARD SIL

WEATHER PROOFING SILANE SEALER



DESCRIPTION

CEMTEC CONGUARD SIL is a deep penetrating liquid designed to protect concrete structures, decks, pavements and surfaces against the adverse effects of salt contamination, moisture and weathering. CEMTEC CONGUARD SIL reacts chemically with the concrete surface to provide a highly effective chloride screen and water barrier. In addition to its ease of application, CEMTEC CONGUARD SIL has the added versatility of being suitable for both new and old concrete surfaces.

FEATURES & BENEFITS

- Provides an efficient, continuous chloride barrier
- Blocks pores and capillaries for outstanding water repellency
- May be applied to new, cured concrete or old concrete
- Extremely high alkali resistance
- Dries to form a tack-free and skid-resistant surface
- Suitable for use over dry or damp (not saturated) concrete
- Full protection in one treatment, but may be reapplied later at any time
- Provides a low cost protection system over the life of a structure
- Protects reinforcing steel against the corrosive effects of surface absorbed chlorides and moisture
- Renders new concrete virtually free of surface scaling
- Retards deterioration of existing, distressed structures

BASIC USES

- Parking structures
- Lane barriers
- Ramps
- Bridges
- Marine platforms
- Auto/truck repair bays
- Exterior concrete surfaces

TECHNICAL INFORMATION

Typical Engineering Data

The following results were developed under laboratory conditions.

Drying time for foot traffic	: 4-6 hrs
For wheel traffic	: 10-12 hrs
Type	: Silane
Flash Point	: 44°C
Shelf life	: 12 months in warehouse conditions.
Solvent	: Mineral spirits

Test specimens NCHRP #244 Test Method

4,000 psi (28 MPa) 3 " (7 6 m m) x 6 " (152mm)cylinders
5.25% air entrainment 15% NaCl solution, 21 day results

	% weight gain	chloride screened	repellency factor
Plain (untreated)	2.802%	—	—
CEMTEC CONGUARD SIL (treated)	0.212%	96%	92%

Test Specimens 4,000 psi (28 MPa) 5.25%

ASTM C-642 Water Absorption 24 hour results

	% weight gain	Water repellency factor
Plain (untreated)	4.85%	—
CEMTEC CONGUARD SIL (treated)	0.364%	92%

Test specimens 4,000 psi (28 MPa) 5.25% air entrainment	ASTM C-672 Scaling Resistance 50 cycles	125 cycles
plain (untreated)	4 moderate to severe	5 severe scaling
CEMTEC CONGUARD SIL (treated)	0 - no scaling	0 - no scaling

COVERAGE	<p>Concrete Surface</p> <p>Troweled Smooth 3.0-3.6 m²/liter</p> <p>Broomed Textured 1.8-3.0 m²/liter</p>	<p>Application Rate</p> <p>Exact coverage rates are a function of surface porosity and density. For exterior concrete with a textured finish, a coverage rate of 1.8 to 3.1 m / liter is required to achieve NCHRP #244 results. Higher coverage rates may be used depending on surface porosity and desired level of protection.</p>
PACKAGING	Available in 210 Ltr drums and 20 Ltr pails.	
COLOR	Contact CMCI tech dept.	

DIRECTIONS FOR USE

Surface Preparation

New Concrete

Surfaces should be well cured using water, wet burlap, polyethylene or KureKote DR curing membrane. Surfaces must be free of all dirt and debris. All joint sealants and caulks should be in place before applying CEMTEC CONGUARD SIL . When using KUREKOTE DR, a high pressure water blast or clean-up with an aggressive scrubber is required at 45 days or longer after application. The concrete surface should be dry for at least 24 hours for maximum penetration and best results.

Old Concrete

Remove all foreign substances that could prevent absorption; dirt, dust, tar, oil, etc. Pressure wash with water and cleaners where appropriate. Membranes of any kind must be removed.

PLACEMENT

Horizontal Surfaces

Flood surface using low pressure sprayer, roller, brush or broom. Broom or squeegee material around for even distribution. Let the surface absorb the CEMTEC CONGUARD SIL solution and follow immediately with a second application before the surface dries. Redistribute any puddles or free standing CEMTEC CONGUARD SIL .

Vertical Surfaces

Apply by sprayer, roller or brush in two applications from the bottom up. Be sure to apply "wet-on-wet" as described for horizontal surfaces.

Mixing

CEMTEC CONGUARD SIL is one component material which requires no pre-blending prior to use. The product should be used directly from the container.

CLEAN-UP

Use mineral spirits, xylene or CEMTEC SOLVENT to clean tools and equipment.

PRECAUTIONS & LIMITATIONS

- Do not dilute CEMTEC CONGUARD SIL with solvents or thinners.
- Protect metal, glass and other surfaces from overspray
- Do not use over saturated surfaces or curing membranes.
- If HVAC intake ducts will distribute solvent odor into adjoining occupied areas of the building, these should be closed in the application area
- When a curing compound is required use only KUREKOTE DR dissipating resin curing compound
- Exposure to moisture will cause gelation
- Solvents in CEMTEC CONGUARD SIL are flammable. Keep away from heat, sparks, open flame, or lighted cigarettes. Use explosion - proof application equipments.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

"High Quality Construction Chemicals"

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The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no warranty and or responsibility is assumed on the performance of work completion executed with use of our products.