

CPD[®] SALTGUARD

DESCRIPTION

CPD[®] Saltguard is a clear, ready to use sealer based on algomeric alkyl-alkoxy siloxane. CPD[®] Saltguard contains siloxane solids suspended in a highly mobile solvent carrier. The material's small molecular structure allows for maximum penetration into the concrete providing surface and subsurface protection. Upon reaction with the surface and humidity, the product is transformed into a highly resistant siloxane compound which is chemically bonded into the substrate.

WHERE TO USE

Applications include concrete flatwork, parking structures, athletic stadiums and engineered concrete structures.

BENEFITS

- \$ an effective chloride screen - 93.6%
- \$ deep penetration - no color change from the natural appearance
- \$ especially suitable for alkaline surfaces
- \$ prolongs the surface life and prevents damage from within by maintaining vapor permeability of concrete
- \$ can be applied to concrete surfaces which are slightly damp
- \$ quick formation of surface repellency and chemical resistance
- \$ high flash solvent carrier makes the material pleasant to work with and prevents loss of active ingredients due to evaporation
- \$ stops intrusion of water, deicing salts and acids which result in costly damage to parking decks and concrete structures
- \$ reduces chloride ion migration

ADVANTAGES OF OLIGOMERIC SILOXANES OVER OTHER SEALING COMPOUNDS:

Conventional deck sealers are surface coating, oils or organic sealants which deposit materials in or on the pores of the surface. These deposits block the natural porosity and permeability of the concrete. Water which may enter the concrete by condensation or from ground water sources migrates through the masonry and will attack the adhesive bond which holds these water repellent solids in place. This results in greatly reduced service life of the treatment and eventual damage to the surface. A further reason for the failure of conventional treatments is their low resistance to alkaline concrete.

Alkaline surfaces attack most resins and oils, drastically reducing the effective life of the sealer. This largely accounts for the high failure rate of most sealers on new concrete surfaces.

CPD[®] Saltguard reacts with the surface and produces a chemical bond with natural materials in the concrete. The siloxane compound which is formed has close affinity with the substrate and does not block the natural permeability of the surface. Internal moisture is allowed to dissipate through the surface and damage which can be caused by entrapped moisture is prevented.

PROPERTIES

Active Substance: Algomeric siloxane with long alkyl groups.
Active Substance Content: 12%
Specific Gravity: 0.81
Flash Point: (Mineral Spirits) 43°C (110°F).
Appearance: Slightly opalescent liquid.
Solvent: Mineral Spirits

CPD[®] Saltguard has been tested according to the most current test procedures in the industry. Testing includes water absorption/repellency rating, penetration and salt spray resistance. Results are listed below and independent test reports are available on request.

1. Chloride Screen test using NCHRP 244 Series IV (One application at 150 ft²/U.S. gallon (3.7 m²/L)) 93.6%
2. Water Absorption (ASTM C-67 and ASTM C-140) 0.34%
3. Scale rating - ASTM C-672-84 - 50 freeze thaw cycles No scaling.
4. Penetration - (1 application) 0.079-0.47" (2-12mm)

The above information is representative of actual production runs. Independent test results may vary from the above by approximately ±10%

APPLICATION

Precautions: This product contains blended solvents 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 approved NIOSH/MSHA approved respirators. When applying to 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 CPD® Saltguard should be changed as quickly as possible.

Preparatory Work:

A test application is necessary on each surface and/or masonry material to be treated to ensure compatibility and desired waterproofing results. Test areas are also useful in determining final application rate and procedures. The test should be applied using the same equipment as for the job application. Test areas should be available for inspection by the engineer throughout the job application. Adjoining caulking, patching and joint sealants should be installed prior to application. Concrete surfaces should be cleaned, free of dust, surface dirt and contaminants. New concrete should be thoroughly cured before application. 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 for best performance of the sealer. Older concrete surfaces should be power washed with high pressure water and appropriate cleaners to ensure removal of surface dirt, oil and contaminants that may have built up over the years. Surfaces to be treated may be damp but should be absorbent to ensure good penetration.

NOTE: If a chemical curing agent is to be used during installation of new concrete, a test area is recommended prior to general application to ensure compatibility. It is impossible to ensure compatibility with all products.

Application:

CPD® Saltguard should be applied as packaged - do not dilute or alter material. Preferred method of application is with low pressure (20 psi) airless spray equipment or with heavily saturated brush or roller. Sprayer should be fitted with solvent resistant hoses and gaskets. When using brushes or rollers, care should be taken to ensure that enough solution is applied. Apply sufficient material to thoroughly saturate the surface making sure to brush out excess material that does not penetrate.

Horizontal Surface Applications:

This product 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.

Vertical Surface Applications:

This product should be applied in two "wet-on-wet" applications for best results on most porous materials. In cases of extreme dense, mirror finish architectural concrete and similar surfaces, it may be necessary to restrict the amount of material applied to one saturation in order to prevent surface darkening.

Apply product in a flooding application, from the bottom up with sufficient material applied to produce a 15 to 20 cm (6" to 8") rundown below the contact point of the new spray pattern with the masonry surface. Allow the first application to penetrate the masonry surface (approximately 3-5 minutes) and reapply in the same saturation manner. Less material will be required to saturate the surface on the second application.

Treated surfaces should be protected from rain and foot traffic for 4-6 hours following application of product. Protect from vehicular traffic for 24 hours.

Maintenance:

Chemical spills, heavy salts and abrasives should be removed from the surfaces as soon as possible.

LIMITATIONS

CPD® Saltguard should not be applied at surface and air temperatures below 5°C (40°F) or above 38°C (100°F). This material should be stored in sealed containers and kept away from extreme heat.

COVERAGE

Porosity and texture of the masonry surface will affect the amount of material necessary for effective treatment. The following is a guide for estimating material requirements for concrete. Always test on actual surface to get precise consumption rates.

Broom Finish: 3-4 m²/L (140-180 ft²/U.S. gallon)

Slick Trowel Finish: 6 m²/L (240 ft²/U.S. gallon)

Older Concrete (very porous) 2.3-3.4 m²/L (95-140 ft²/U.S. gallon).

Some extremely dense concrete materials contain integral waterproofing agents and admixtures. These surfaces may require very little CPD® Saltguard and consumption rates of 7.4-8.6 m²/L (300-350 ft²/U.S. gallon) are adequate.

STANDARDS

Approved for use on MTO (Ministry of Transportation, Ontario) projects.

PACKAGING

208L (55 U.S. gal) drums - 190 kg (419 lb)/drum
18.9L (5 U.S. gal) pail - 21 kg (47 lb)/pail
3.79L (1 U.S. gal) pail - 5 kg (11 lb)/pail

CLEAN UP

Clean up with Mineral Spirits.

STORAGE

Contains flammable solvents. Keep away from open flame. Keep containers tightly closed when not in use.

SHELF LIFE

Three years from date of manufacture when stored in original unopened container, and under normal warehouse conditions.

SAFETY PRECAUTION

Flammable Liquid. Consult Material Safety Data Sheet (M.S.D.S.) for specific instructions. MSDS #123.

WARRANTY

The recommendations made and the information herein is based on our own and independent laboratory experience, and is believed to be accurate under controlled conditions. However, no warranty or guarantee of accuracy is made because we cannot cover every possible application of product nor anticipate every variation encountered in weather conditions, job-conditions, methods used and types of surfaces on which the product is applied. The users shall make their own tests to determine the suitability of such products for any particular purpose.

CPD[®] makes no warranties with respect to this product, expressed or implied, without limitation, the implied warranties of merchantability or fitness for a particular purpose.

CPD[®]'s liability shall be limited in all events to supplying sufficient product to re-treat and/or repair the specific area to which CPD[®] product has been applied. CPD[®] reserves the right to have the true cause of any difficulty determined by accepted test methods. CPD[®] shall have no other liability, including liability for incidental, consequential or resultant damages, however caused, whether due to breach of warranty, negligence, or strict liability.

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