CONDEK SYSTEM (V.O.C. - OTC Compliant)

Description and Use

CON-DEK System is a two coat protection system for concrete slabs, decks, walls, abutments, concrete barriers and retaining walls. The two coat system prevents the intrusion of chlorides and water while providing excellent vapour transmission. The two coat protection system consists of:

a) A base coat of Cipadam S-15 which is a clear, penetrating, breathable sealer containing a 15% solution of silane in an solvent carrier that chemically penetrates into the substrate and is transformed into a highly resistant silane compound which is that bonded into the cement substrate. Cipadam S-15 reduces chloride ion migration through cement materials.

b) The top coat of #920 Concrete Sealer with a minimum of 25% solids is a colorless acrylic resin in a solvent or water base. The top coat cures to a tough, UV resistant film which has excellent vapour transmission capabilities while dramatically reducing water absorption. The top coat of #920 Concrete Sealer protects concrete from penetration and staining by oil, grease, deicing salts and other contaminates.

Advantages

- An effective Chloride Screen.
- Excellent freeze thaw resistance.
- Prolongs the surface life and prevents damage from within by maintaining vapour permeability of concrete.
- Greatly reduced effects from salt scaling.
- Excellent penetration into substrate.
- Eliminate development of Efflorescence.
- Protects concrete surface from penetration and staining by oil, grease, deicing salts and other contaminates.

Properties

CIPIDAM S-15

Active Substance Content: .....15% by weight
Specific Gravity: 0.86
Flash Point: (T.C.C.)..... 4.4°C (40°F)
Color and Finish: .....Clear, invisible

#920 Sealer Water Based

Drying Time @ 21°C (70°F) with 50% r.h.:
Dry to touch ……1 hour
Light Traffic ……8 hours
Heavy Traffic ……24 hours
Solids Content (Colored) ……...38%
(Clear) ……..28%
V.O.C. Content ……..57 grams/L (Clear)
……...92 grams/L (Coloured)
Flash Point ……..N/A
Specific Gravity ……..1.03

Installation

Precaution: Cipadam S-15 (Primer Coat) contains 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 Cipadam S-15 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 insure compatibility and desired waterproofing results. Test areas are also useful in determining final application rate and procedures.

Test should be applied using the same equipment as for job application. Test areas should be available for inspection by the engineer throughout the job application.

Adjoining glass metal and painted surfaces should be protected from overspray and splash of Cipadam S-15. Inadvertent splashes should be removed using mineral spirits before the solution has dried on the surface.

Surface Preparation

All caulking, patching and joint sealants should be installed prior to application of Cipadam S-15. Concrete surface should be cleaned free of dust, surface dirt, and contaminates. New concrete should be thoroughly cured before application of Cipadam S-15. New concrete normally does not require etching, however, slick-trowel finished concrete that has been 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 assure removal of surface dirt, oil and contaminates that may have built up over the years. Surface to be treated may be damp but should be absorbent to assure good penetration of Cipadam S-15.

Note

If a chemical curing agent has been used during installation of new concrete, it must be removed prior to application of the sealer.

Application

Cipadam S-15 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 a 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 assure that enough solution is applied. Apply sufficient material to thoroughly saturate the surface making sure to brush out excess material that does not penetrate.

When applying to flat surfaces: Cipadam S-15 should be applied in a single saturating application with sufficient material applied so that the surface remains wet for a few seconds before penetration into the concrete. Surface residues, pools and puddles should be broomed out thoroughly until they completely penetrate into the surface.

Treated surfaces should be protected from rain, foot traffic and sun for 24 hours following application of Cipadam S-15.

Coverage Rates
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.

Product	First Coat	Second Coat
Cipadam S-15	2.3 - 5.9 m^2/L (24.76 - 63.51 ft^2/L)	
#920 Sealer (Solvent based)	4.9 – 7.4 m^2/L (52.74 – 79.65 ft^2L)	7.4 – 9.8 m^2/L
#920 Sealer WB (Water based)	6 – 7.4 m^2/L	7 – 8 m^2/L

Application (Top Coat)
#920 Concrete Sealer should be applied to a dry surface which is normally 24 hours after application of the primer coat. Application of the top coat may be by brush, roller or spray depending on surface conditions.

Do not open for traffic until 24 hours have passed.

Note: *For complete application instructions – see separate data sheets for CIPADAM S-15, #920 Solvent Based Sealer, #920 Water Base Sealer.*

Clean up
Clean equipment with Xylene immediately after use.

Caution
Both products contain flammable, hydro carbon solvents. Keep away from open flame. Keep containers tightly closed when not in use. Provide ventilation in work areas during and after application. Sprayers require neoprene hoses and washers. Use only explosion proof spray equipment.

Packaging
20 L pails ---------- 208 L drums

Limitations
- Do Not apply at temperatures below 5°C
- Protect from rain, foot traffic & sun for 24hrs.
- Wait 24hrs before opening to traffic.

Storage
Store under normal heated warehouse conditions.

Shelf Life
Two years from date of manufacture in unopened original container in normal heated warehouse conditions.

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.

WARRANTY (cont'd)

Concrete Chemicals makes no warranties with respect to this product, expressed or implied, without limitation, the implied warranties of merchantability or fitness for a particular purpose.

Concrete Chemicals' liability shall be limited in all events to supplying sufficient product to re-treat and/or repair the specific area to which Concrete Chemicals product has been applied. Concrete Chemicals reserves the right to have the true cause of any difficulty determined by accepted test methods. Concrete Chemicals 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.

THIS WARRANTY MAY NOT BE MODIFIED OR EXTENDED.