



Sealex Industries

Waterproofing Systems, Sealers & Sealants

SEALEX 5000

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The ultimate for waterproofing, hardening, dustproofing and preserving new or old concrete STOPS MOULD & MILDEW – STOPS URINE INGRESS ENVIRONMENT AND USER FRIENDLY

Spaces between particles leave untreated concrete subject to penetration by moisture, oils, acids, etc. SEALEX 5000 penetrates into the concrete where it reacts with free lime and alkali to fill the voids and bond the particles into a solid mass, creating a permanent seal.

CURING

SEALEX 5000 is extremely effective in warm weather, preventing temperature cracking when applied right after troweling and kept saturated for 30 minutes.

BONDING

SEALEX 5000 eliminates dusting and flaking and prepares the treated surface for paints, caulking compounds, adhesives and floor coverings, and increases the bond and life of these materials. It is coatable and compatible with any type of covering.

HARDENING

SEALEX 5000 makes concrete up to 18 percent harder in 28 days. Concrete continues to harden after that, but at a slower rate.

SEALING

SEALEX 5000 seals concrete and other cement based materials into a mass that is essentially solid, rather than porous. Its penetrating quality provides deep sealing that provides effective sealing for the life of the concrete.

WATERPROOFING

SEALEX 5000 becomes an integral permanent part of the concrete by reacting with the free lime and alkali found in all concrete, thus completely waterproofing and substantially strengthening the structure of the concrete.

THERMAL MASS

SEALEX 5000 increases the thermal mass of concrete by as much as 40 %.

SEALEX 5000 is a colorless, non-toxic, non-flammable, low viscosity, spray applied liquid formulation that provides a permanent internal moisture barrier for waterproofing and preserving new and old concrete.

PRODUCT DESCRIPTION

SEALEX 5000 provides a unique barrier for water proofing concrete and dense cementitious masonry products. Whereas most other waterproofing products develop only a surface coating, SEALEX 5000 is designed to penetrate deeply (up to 8 inches) where it becomes an integral part of the concrete. SEALEX 5000 is a water based, internal waterproofing system which contains the same inorganics present in concrete.

A proprietary wetting agent composed of sixteen enzymes remarkably reduces the liquid's surface tension, which enables the SEALEX 5000 to penetrate deeply into the small pore diameters and hairline cracks.

This filling of all the inter-connected pores and fissures stops liquid transmission by the formation of a gel within the pores and interstitial spaces within the first 72 hours after the SEALEX 5000 application. This gel swells in the presence of moisture and prevents the passage of water and other liquids under hydrostatic pressure.

BASIC USES:

SEALEX 5000 preserves new or old concrete. SEALEX 5000 hardens new concrete and retards dusting without altering the surface appearance, texture, or bonding characteristics. The occlusive seal formed by SEALEX 5000 limits deterioration of concrete and dense cementitious masonry by resisting the penetration of acids, alkalis, oils and salts. SEALEX 5000 is formulated to perform against below grade hydrostatic pressure and is also excellent as an on grade moisture barrier.

ADVANTAGES:

- hardens concrete, minimizing surface dusting, pitting, spalling and hairline cracking
 - inhibits water seepage and saponification
 - resists acid, alkali and salt and oil attack
 - seals against seepage below grade (i.e. from hydrostatic head)
 - stops capillary action
 - aids in curing new concrete uniformly, resisting spot drying and hairline shrinkage cracking – can be applied immediately after finishing
 - ejects grease and oils which have penetrated concrete.
- SEALEX 5000 emulsifies such materials and floats them to the surface
- resists such further penetration
 - prepares concrete surfaces for subsequent applications of paint, stains or adhesives specifically formulated for use on concrete surfaces – a test area should be tried before proceeding with any large areas of seamless materials – moisture testing is often used in this determination
 - promotes greater paint durability by helping to resist peeling, cracking or crumbling – increases bonding strength of latex and poly-vinyl paints

LIMITATIONS:

- SEALEX 5000 is formulated primarily for concrete and other substrates containing calcium carbonate and lime and does not effectively seal asphalt, metal or wood, or clay products
- SEALEX 5000 will not penetrate acrylic or nonporous rubber based paints
- SEALEX 5000 must be applied at full strength to attain the desired results

COMPOSITION:

SEALEX 5000 is a non-toxic, (water borne) blend of inorganics which react with water and natural byproducts in the formation of concrete to form an internal system of suspended solids. These suspended solids extend throughout the concrete filling the capillaries and pores thereby creating a permanent moisture barrier. SEALEX 5000 contains no organic materials or inorganic heavy metals. SEALEX 5000 is neither flammable or explosive and does not emit any harmful fumes.

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TYPES:

SEALEX 5000 for normal applications
SEALEX 5000 PLUS for applications on concrete surfaces permeated with oil, grease or acid
SEALEX 5000 PRIMER required to 'fortify' concrete block or cinder block prior to applying the SEALEX 5000

SIZES:

20 litre drums & 200 Litre drums

TECHNICAL DATA

Physical Properties

Appearance Colourless

Odor Negligible

Toxicity None

Flash Point None

Resistivity 50 Ohms

pH 12.1 pH Scale Units

Total Solids 10.1 %

Specific Gravity 1.075

Compressive Strength:

SEALEX 5000 significantly increases the compressive strength of concrete because the silicate constituent of the material reacts with the calcium hydroxide (present in all concrete) to form calcium silicate hydrate.

Absorption:

The chemical reaction between SEALEX 5000 and the free lime and alkali within the concrete seals the small pores and hairline cracks to impede the absorption of moisture.

Stain Resistance:

Treated concrete is noticeably more resistant to staining and is more easily cleaned than untreated concrete.

Dusting Resistance:

Concrete treated with SEALEX 5000 significantly more resistant to dusting as compared to untreated control samples.

Freeze Thaw Resistance:

SEALEX 5000 imparts an improved resistance to freezethaw damage under test conditions.

Resistance to Salt Attack:

SEALEX 5000 application to concrete imparts resistance to salt attack (5% NaCl solution) under freezethaw conditions.

Resistance to Chemicals:

Concrete treated with SEALEX 5000 develops a high resistance to chemical attack. This resistance is imparted by the highly chemical resistant inorganic solids which permeate the concrete and form a protective coating around the individual cement particles. Concrete treated with SEALEX 5000 is highly resistant to oils, grease, petroleum and non-petroleum based hydrocarbon solvents, caustic alkalis and most of the organic and inorganic acids.

Approvals:

USDA - chemically acceptable as a coating for application to structural surfaces where there is a possibility of incidental food contact in establishments operating under the Federal Meat and Poultry Products Inspection Program. SEALEX 5000 has been approved by The Regulatory Enforcement and Animal Care (REAC) division of the U.S. Dept. of Agriculture approved for use in all animal holding and shelter facilities.

INSTALLATION

Preparatory Work:

No preparatory work is generally required. However, if the concrete surface is coated with heavy wax, thick grease, recently applied surface sealer, rubber or acrylic paint or other impervious material, remove such materials so that the SEALEX 5000 can reach the surface of the concrete where it will be allowed to penetrate into the concrete. Accidental over application will not discolor the surface.

For oil, grease or acid conditions, use SEALEX 5000 PLUS

Method of Application:

Dampen surface to be treated (do not saturate) using a fine mist water spray. Saturate the surface thoroughly with SEALEX 5000 at an approximate rate of 3.7m² per litre, depending upon porosity of the concrete. Low pressure spray equipment, such as a hand pumped garden type sprayer works well for medium sized areas. For large areas, airless spray equipment is very efficient. Small areas can be effectively treated using a spray bottle. Brushes or rollers are not recommended because of the low viscosity of the SEALEX 5000 Do not allow the SEALEX 5000 to pond or puddle, as a white residue will likely form on the surface of the concrete. Move the excess material from the low spots on the floor to the high spots with a squeegee, mop or broom. Any remaining material should be picked up with a wet vac or mop. The time for additional applications can be judged by observing the time it takes for the SEALEX 5000 to soak into the concrete. If the SEALEX 5000 soaks in quickly, generally less than fifteen minutes after application, additional material should be applied.

IMPORTANT:

Indoors: Approximately 2 to 3 hours after application of the SEALEX 5000, water dampen the treated surface using a fine water spray mist.

Outdoors: To prevent flash evaporation of the SEALEX 5000 From the effects of wind or direct sun exposure, keep the surface damp for 24 hours.

CAUTION: Do not flush with water as some of the SEALEX 5000 still on the surface may be washed away by this action. If necessary, 24 hours after application, flush or mop the surface thoroughly with water to flush off any foreign material that may have been brought to the surface. Repeated flushings may be required as the SEALEX 5000 brings contaminants to the surface.

SEALEX 5000 will not penetrate latex, polyvinyl or acrylic based paints. Unpainted surfaces: Generally, no surface preparation is necessary.

Before painting over SEALEX 5000 treated areas, the surfaces should be flushed with clear water until the surface no longer exhibits leaching of alkali or foreign matter. For surfaces such as basement and outside walls, follow standard procedures as described above. SEALEX 5000

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will seal against hydrostatic pressure; however, flowing water must be stopped before application. Curing new concrete: Apply SEALEX 5000 to the surface as soon as the concrete finishing operations have been completed, or when the forms have been removed, saturating the surface thoroughly. Concrete will cure slowly, producing a hardened waterproof surface. SEALEX 5000 is excellent in hot or windy weather, since it promotes uniform curing, increases density, resists hairline shrinkage cracking and stops surface dusting.

Precautions:

SEALEX 5000 should not be allowed to remain on aluminum or glass, including eyeglasses. In the event of contact, wipe off immediately with a wet cloth or sponge. SEALEX 5000 will stiffen leather gloves or footwear. SEALEX 5000 should not be applied to glazed floor or wall tile, or glazed or hard fired brick where the glaze will prevent the penetration of the material. However, SEALEX 5000 may be applied over these materials if the intent is to seal the grout joints. In such cases, after the SEALEX 5000 has sufficiently soaked into the grout, remove all excess material from the surface with a wet vac, squeegee or mop. This will greatly minimize the possibility of a white deposit or film from forming on the tile or brick. When in doubt, apply SEALEX 5000 to a small test area. SEALEX 5000 is not recommended for use on porous brick, pavers or tile as there is not sufficient alkali (lime) in these materials for the SEALEX 5000 to react with.

In most cases, white discoloration will occur on such surfaces. SEALEX 5000 should not be applied to masonry structures having a mortar or grout containing a latex binder. SEALEX 5000 should not be applied or stored at freezing temperatures. 5 degree minimum surface temperature recommended. If freezing occurs during storage, agitate the thawed material thoroughly to assure uniform solution. During outside applications, care should be taken to protect vegetation and adjacent areas from direct spray or overspray.

Distributed in Australia by;

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