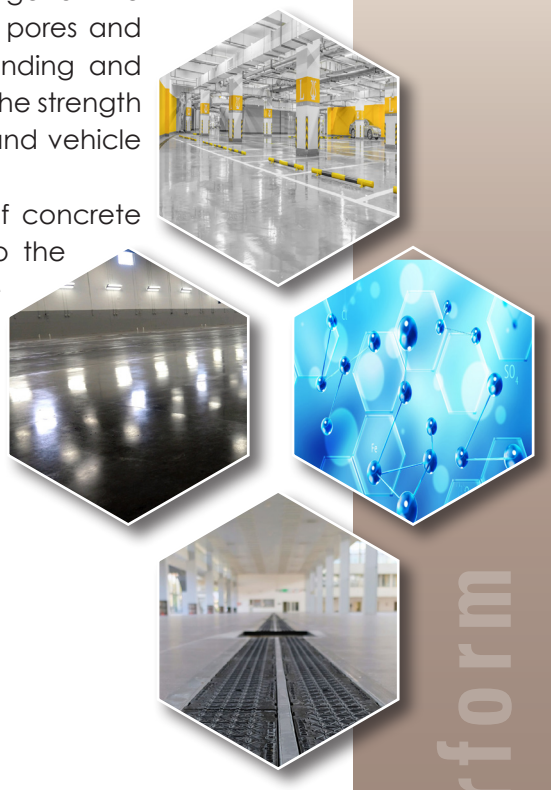
# CHEM-**GUARD**

## Concrete Densifier & Chemical Hardener

CHEM-GUARD liquid densifier and chemical hardener is a high performance penetrating consolidation agent for fresh and old concrete. It is used for restoration and protection of mineral substrate and protection against soiling and damage of the pore structure. This silicate liquid reacts with concrete, filling the pores and dustproofing, for application to concrete after set. It is dust binding and strengthening of structures and surfaces. CHEM-GUARD increases the strength of the wear surface of concrete floors subjected to pedestrian and vehicle traffic.

CHEM-GUARD offers substantial improvement of the durability of concrete surface when compared to untreated concrete. In addition to the densifying and hardening action, CHEM-GUARD also solidifies the concrete, eliminating dusting and pitting. Penetrates deeply in to concrete to densify and harden surfaces to help prevent entry of moisture and other foreign matter.



### Features

- Increases abrasion and anti-slip resistance
- Improves Compressive strength
- Improves chemical , petroleum and resistance
- Water-based and Ready -to-use
- Easy to maintain, no waxing necessary
- Reduce the absorption of water and damaging salts
- Protects against scratching or peeling and dust proofer
- Easy to use and apply
- Better curing ( Slow loss of moisture )

### Field of Application

Suitable for new and old concrete. CHEM-GUARD is recommended for use wherever hardened, dustproofed, and improved chemical and abrasion-resistant surfaces are required. Ideal applications include floors in industrial plants and warehouses, storage silos, sewage plants, chemical processing facilities, refineries and heavy pedestrian traffic areas such as civic centers, sports arenas, stadiums, hospitals, show rooms, airports and museums. CHEM-GUARD can successfully be used in conjunction with shake-on hardeners.

### Technical Propertie

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| Construction | Special Resin Solution | |
| Form | Liquid | |
| Density | 1.15 Kg/Litre approx | |
| Colour | Clear | |
| pH | 11.4 | |
| Abrasion Resistance | 40 % Higher | ASTM C779 |
| Application temperature | +5° C to 45 °C | |
| Permeability | No Seepage | ASTM E96-95 |
| Bonding Strength | 25 % Higher | ASTM D 3359 |
| Compressive Strength | 40 % Higher | ASTM C39 |
| Impact resistance | 20 % Higher | ASTM C 805 |
| Static Coefficient of Friction | ≥0.6 | ASTM C 1028 |
| UV Resistance | Excellent | ASTM G 23 |
| VOC | ≤ 50 g/L | |

engineered to perform

**Application**
**Surface Preparation**
Remove unsound concrete and fill holes, cracks and deteriorated areas. All residue, oil, sealers, waxes, contaminants and laitance must be removed from surfaces to ensure max. penetration. Pre-wet old concrete/screed surfaces in advance (1 day before application of the product). On newly places concrete ,CHEM-GUARD can be applied after final troweling.

**Application**
CHEM-GUARD may be applied by spraying on the surface to be treated with a low pressure pump or by roller directly on the floor. Apply several generous layers of the material wet-on-wet using a flow coating procedure and without applying pressure. Use a rubber scraper to spread the material, and then brush through with a broom. Remove any excess material and/or rinse with water after a suitable gel formation time. (Approx.30 min).
Fresh Concrete – Apply undiluted CHEM-GUARD by sprayer, squeegee or broom . Keep the surface wet with CHEM-GUARD for a minimum of 30 minutes. (A range of 30-60 minutes may be required depending on temperature and conditions). Pay particular attention to porous or dry areas. These areas must be kept wet all times with CHEM-GUARD. Once surface begins to gel and slippery, immediately spray the surface with a light water mist. Scrub the surface with a broom or scrubber to increase the penetration of CHEM-GUARD. Continue to work the CHEM-GUARD in to the surface for another 5-10 minutes or until CHEM-GUARD becomes gelled and slippery for a second time .At this time, thoroughly flush the surface with water. During the flushing process, agitate the surface with water. During the flushing process, agitate the surface with a broom to aid in removal of the excess CHEM-GUARD.
Do not apply CHEM-GUARD on dusty and films substrates. Do not apply CHEM-GUARD on dirty surfaces or on surfaces which are soaked with oily and greasy. Take appropriate measures to protect adjacent building elements and materials that should not come into contact with the product. When used with pigmented screeds, colour changes may occur after the material is applied. Depending on the ambient conditions, the reaction may take up to 90 days.

Drying Time
2-4 hours. CHEM -GUARD dries very quickly on new concrete and may be extended on existing old concrete due to surface conditions. Foot traffic preferable after 12 hours.

**Packing** CHEM-GUARD is available in 20 Kgs can, 200 Kgs drum.

**Consumption**
Approx.0.25 to 0.50 kg/m² according to the level of porosity of the concrete (Surface conditions apply)
**Health & Safety**
May cause skin irritation, eye irritation. May cause an allergic skin reaction Protective Measures: The use of safety glasses and chemically resistant gloves is recommended. Use appropriate clothing to minimize skin contact.

**FirstAid**
Eye Contact: Hold open eyes under running water for 15 minutes. Seek medical advice.
Skin Contact: Wash skin with soap and water. Seek medical advice if irritation develops.
Inhalation: Remove affected person to fresh air. If necessary, use artificial respiration. Seek medical advice.
Ingestion: If product is swallowed, call physician or poison control center. DO NOT INDUCE VOMITING, or give diluents to someone who is unconscious, having convulsions, or unable to swallow. Seek medical advice

**Storage**
CHEM-GUARD has a shelf life of 24 months from date of manufacture if stored in dry conditions away from direct sunlight temperatures between 5°C and 45°C.

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