1. **PRODUCT IDENTIFICATION:**
   
   **PRODUCT NAME:** EVERCRETE DEEP PENETRATING SEALER (DPS)
   **CHEMICAL NAME:** CHEMICAL BLEND (PROPRIETARY MIXTURE) CONTAINING WATER, SODIUM SILICATE, BONDING CATALYSTS AND INERTS.
   **SUPPLIER:** EVERCRETE CORPORATION US
   Miami Center,
   201 South Biscayne Blvd, Floor 28,
   Miami FL 33131-4325
   
   **TEL:** 305 538-8321
   **FAX:** 305 538-8739

2. **COMPOSITION ON INGREDIENTS:**

<table>
<thead>
<tr>
<th>INGREDIENT NAME</th>
<th>CAS No.</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>65-75%</td>
</tr>
<tr>
<td>Sodium Silicate</td>
<td>1344-09-8</td>
<td>25-35%</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

3. **HAZARD IDENTIFICATION:**

   May cause eye irritation and redness upon direct contact.
   Non-toxic, however, huge amounts of ingestion may cause Gastro-Intestinal Tract distress.

4. **FIRST AID MEASURES:**

   **Ingestion:** Promptly get affected personnel to drink large volumes of water to dilute the swallowed chemical. After the liquid has been swallowed, try to induce vomiting by having affected person touch back of his throat with his finger. Get medical attention.
   
   **Skin:** Promptly flush contaminated skin with soap or mild detergent and water. Promptly remove clothing if penetrated and flush the skin with water.
   
   **Eyes:** Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes and get medical attention.
5. **FIRE FIGHTING MEASURES:**
   Extinguishing Media: Not Applicable

6. **ACCIDENTAL RELEASE MEASURES:**
   Spill Cleanup Methods: Rinse surface with water or excess will be absorb with dry sand or earth.

7. **HANDLING AND STORAGE:**
   Usage Precautions: Avoid spilling, skin and eye contact.
   Storage Precautions: Storage temperature between 5 ºC to 60 ºC.
   Do not store under direct sunlight exposure.
   Do not keep the product in containers made of galvanized metal or aluminium.

8. **EXPOSURE CONTROLS AND PERSONAL PROTECTION**
   Eye Protection: Use approved safety goggles or face shield.
   Other Protection: Provide eyewash, quick drench.
   Hygienic Work Practices: Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes wet. Use appropriate hand lotion to prevent defeating and cracking of skin.

9. **PHYSICAL AND CHEMICAL PROPERTIES:**
   Appearance: Clear Liquid
   Odor: None
   Boiling Point: 100ºC
   Specific Gravity: 1.01 ~ 1.11
   Vapor Pressure: Unknown
   Solubility in Water: Complete
   pH (1% solution): 10 ~ 12
   Flash Point: None, non-flammable

10. **STABILITY AND REACTIVITY:**
    Stability: Normally stable.
    Materials to avoid: Aluminium, Aluminium Powder, Tetrahydrofuran, Sink Prowler, Simpler, Strong Acids.
11. **TOXICOLOGICAL INFORMATION:**
   - ACGIH Threshold Limit Value: Not established for mixture
   - Carcinogen – NPT Program: NO
   - Carcinogen – LARC Program: NO
   - Chronic Health Hazards: Not Known
   - Contains no hazardous materials as defined by OSHA and ACGIH

12. **ECOLOGICAL INFORMATION:**
   - The product increase pH value in water and ground.

13. **DISPOSAL CONSIDERATIONS:**
   - Disposal Methods: Dispose of in accordance with Local Authority requirements.

14. **TRANSPORT INFORMATION:**
   - ADR CLASS No.: Not dangerous according to ADR.
   - HAZARD No. (ADR): Not applicable.
   - IATA CLASS No.: Not dangerous according to IATA.
   - HAZARD No. (IATA): Not applicable.
About Evercrete® Deep Penetrating Sealer (DPS)

Evercrete® DPS is an environmentally friendly, non-toxic, non-flammable, odorless, clear, water-soluble liquid compound which is safe and easy to use. Evercrete® DPS outlasts and outperforms every other sealant on the market today. It is inorganic and based on natural minerals, affecting neither your health nor the environment. Evercrete® DPS can be stored for extended periods.

How does it work?

Evercrete® DPS penetrates up to approximately 3cm below the surface of concrete and chemically reacts with the calcium hydroxide (CaOH₂) present in the concrete, this reaction occurs in two stages: The first stage an air-silicate gel is formed which then turns into a glass-like crystalline structure. The second stage; during a reaction between the Evercrete® DPS silicate and the calcium hydroxide in the cement, the hydroxide group is vaporized. In short, the chemical reaction ensures that the impregnated layer is dried. The results: Concrete with increased hardness and strength whilst reducing moisture vapor emissions and permanently stopping the penetration and flow of water and water-borne contaminants such as chlorides and acids, both on the positive or negative side.

Evercrete® DPS therefore has the ability to extend the lifetime of concrete structures by protecting them against the elements to which they are subjected to on a daily basis such as rain, salts, oils and chemicals.

Advantages of using Evercrete® DPS

- Waterproofs and preserves concrete.
- Protects concrete against chloride ion ingress.
- Permanent, no re-coating required.
- Increases concrete compressive strength and surface hardness.
- Anti-Carbonation.
- Protects concrete from effects of chemicals.
- Can be applied to both dry and damp surfaces.
- Eliminates the formation of dust on concrete.
- Improves adhesiveness for other finishes.
- Reduces efflorescence.
- Non-toxic and environmental friendly.

What’s unique about Evercrete® DPS?

According to U.S. testing laboratories, the interior of a piece of concrete contains a minimum of 360 times the amount of alkali (calcium hydroxide CaOH₂) as compared to the surface area. Evercrete® DPS permeates into the surface by up to 3cm to become a permanent part of the concrete - not just a surface coating. Because it becomes part of the concrete, you only have to apply Evercrete® DPS once (refer to application procedures). Most other sealant applications are surface treatments and, by their own chemical compositions, will react negatively with the moisture and alkali in the concrete and soon peel off or leach out due to this aeration and deterioration. Evercrete® DPS is unaffected by UV light exposure.
Application

→ Shake or stir Evercrete® DPS prior to use.
→ The concrete substrate should be sound, free from voids, cracks, oil, grease, curing agents or other contaminants.
→ It is preferable to pre-wet the cleaned surface first.
→ Apply Evercrete® DPS liberally by low-pressure spray.
→ Apply a second coat at least 24 hours after the first coat.
→ On walls, apply Evercrete® DPS from the bottom up.
→ On floors, apply Evercrete® DPS so that the surface has a mirror wet look. Do not allow ponding.
→ If the floor or wall is to be covered with tiles, paint etc, wait at least seven days before covering.
→ Evercrete® DPS is not meant to fill or seal visible cracks.
→ Do not apply to glass, glazed surfaces or aluminum as etching will occur. In case of accidental contact, immediately rinse thoroughly with water.

Recommended Coverage
Coverage 8 - 18m² (approx. 80 - 180 sq.ft.) per gallon (two coats). The coverage depends on the permeability of the concrete substrate and the surface absorption.

Technical Data
Form: Colorless clear liquid
Flash point: Non-flammable
Specific gravity range: 1.04 ~ 1.10
Odor: None
Solubility in water: Complete
Toxicity: Non-toxic
Diluent: Use undiluted

Packaging
55 US gallon barrels
5 US gallon pails

For more information on Evercrete® products please visit our website at: www.evercrete.com

Product of the USA.
Evercrete Corporation
Miami Center
201 South Biscayne Blvd, Floor 28
Miami FL 33131-4325
USA
Tel: 305 538-8321
Fax: 305 538-8739

For distributors visit: www.evercrete.com , info@evercrete.com
PERFORMANCE SPECIFICATION FOR
EVERCRETE'S DEEP PENETRATING SEALER (DPS)
WATERPROOFING WORKS, PRESERVING AND HARDENING
OF ALL CONCRETE STRUCTURES

1. PREAMBLE
The following specification is designed for Evercrete Deep Penetrating Sealer (DPS) material performance on normal, sound construction grade concrete be it a new or old structure, wet or dry.
However for concrete found to have abnormal conditions such as excessive carbonation, alkali aggregate reaction, very high permeability or other significant factors affecting the concrete, this specification may not apply and a new specification may need to be tailored to suit on a specific case by case basis. The supplier of the material will be able to advise further.

2. GENERAL
Treatment shall be carried out to the surfaces described in the contract in accordance with the manufacturer’s instructions. All works to be in accordance with the relevant Occupational Health and Safety requirements. No works shall be carried out on the site without the Engineer or his representative in attendance, unless agreed.

3. MATERIAL STORAGE
3.1 Materials shall be stored in an enclosed cool dry area, protected from direct sunlight.
3.2 The material shall remain in its original sealed containers until time of use.
3.3 The contractor shall provide the Engineer, upon delivery, proof that the material is genuine Evercrete Deep Penetrating Sealer. No material shall be used on site until this information has been provided and accepted by the Engineer.
3.4 The material shall be used as supplied and not diluted.
3.5 The contractor shall deliver to site sufficient material to carry out the work in sealed containers bearing a label, which shall list the manufacturer’s name, trade name, application rate and precautionary methods required.

4. SPRAY EQUIPMENT
4.1 By brush, roller or spray in accordance with the manufacturer’s instructions.
4.2 No water shall be permitted to enter any part of the system.
4.3 Low pressure sprayer (max 20-30 psi).
5. SURFACE PREPARATION
5.1 All surfaces to be treated shall be cleaned of mortar, concrete, dirt and oil; nail holes and voids pointed and concrete rubbed. No surface shall be treated that is not clean. Cleaning works to be carried out by others.
5.2 Cracks larger than 0.3mm and voids, holes etc shall be filled in with a compatible cementitious repair material.
5.3 Drilling of holes by other trades shall be carried out prior to the application of Evercrete Deep Penetrating Sealer (DPS).
5.4 If such drilling of holes is carried out after the application of DPS, Evercrete will sell DPS material to the Main Contractor, in order to re-spray those areas.
5.5 All re-spraying of holes shall be treated in accordance with the manufacturer’s instruction see item 9 below.

6. PROTECTION
All surfaces that are not to be treated shall be protected from spillage, dripping, or splattering of the waterproofing material. Immediately wipe off the material if it is sprayed onto glass or aluminum.

7. MATERIAL
7.1 Waterproofing material shall be clear, colorless, odorless, nonflammable and nontoxic, tasteless.
   When sprayed onto the hardened concrete it should penetrate the surface to become an integral part of the concrete by chemically reacting with the calcium hydroxide (lime and alkali) from the cement to form a non-soluble seal within the pores and capillaries of the concrete, permanently sealing it against ingress of moisture yet allowing the concrete to breathe.
   There should be no change to the surface characteristics after the application of the Deep Penetrating Sealer.
7.2 The material shall not be diluted by solvent or any other fluid.
7.3 The material shall possess the following properties:
   Water based: yes
   Specific gravity: 1.01 – 1.11
   PH: 10.00 – 12.00
   Flash point: non-flammable
   Non-toxic: yes
   Chemical identity: proprietary mixture, containing silicates, bonding catalysts and inerts
7.4 The treatment system shall meet the following performance requirements:
   1. Water Absorption: Drop in water height 0 – 10 mm (AASHTO Designation TP50-95)
   2. Concrete Ability to resist Chloride Ion Penetration: Less than 2000 coulombs (ASTM C1202-91)
   3. Crack Sealing Capabilities till to 0.5mm (Modified AASHO T259)
   4. Resistance to De-icing Chemicals, Salt and Moisture Contamination during Freeze/Thaw Conditions: Treated Concrete shall pass ASTM C672
   5. Water permeability is not more than 0.093ml/m²/s in accordance with BS1881. Pt5: 1970 Initial Surface Absorption Test (ISAT)
8. TRAINING AND SITE SUPERVISION
In all cases where DPS shall be applied by a contractor, who is not an approved applicator, Evercrete shall offer to train the contractor’s site staff and labourers if required to apply the material in accordance with the requirements. Training will include cleaning of the area, equipment usage and spray methods.

9. APPLICATION
9.1 Records
The contractor shall maintain a record of the quantity of material used and the areas treated for each application to verify that the minimum required coverage rate has been achieved. The format of such record shall be agreed with the Engineer and kept up to date and available for the Engineer’s inspection throughout the course of the work.

9.2 Evercrete Deep Penetrating Sealer Application
1. Work sequence to be agreed by the Engineer.
2. Shake or stir Evercrete DPS prior to use.
3. Ensure concrete surface is clean and free from oil and grease.
4. Pre wet the concrete.
5. Apply using a low-pressure garden-type sprayer, bush, roller or mop.
   a. Apply liberally and saturate all areas.
   b. Vertical walls should be applied from the bottom up to ensure uniformity of application.
   c. On horizontal surfaces the material should be applied so that the surface has a mirror wet look for at least 5 seconds after application. It should not be excessively applied so as to cause ponding.
   d. On soffit areas the material shall be applied by continuous spray/roller/brush technique. The treated surfaces shall have a “mirror wet look” for at least 5 seconds.
6. Average coverage is about 15m² per US gallon for two coats. The coverage rate depends on the porosity of the concrete and varies from project to project. Under normal conditions, for general concrete waterproofing, 2 coats are required. Depending on the concrete porosity, additional coats may sometimes be required.
7. Under normal ambient conditions, it is recommended that the second coat and any subsequent coats be applied at least 24 hours after the first application.
8. Holes drilled after the application of the second coat of Evercrete DPS, should be retreated with another two coats of Evercrete DPS in accordance with items 5 above
9. Where it is desired to paint the surface, the paint should be applied at least 7 days after completion of Deep Penetrating Sealer application, after first ensuring the surface is dry.

10. WARRANTY
Evercrete Deep Penetrating Sealer is guaranteed to give the results as represented when used as directed. The manufacturers liability is limited to supplying sufficient material for a re-application. The product performance is related to the quality of workmanship in the application of the material. The contractor may at his discretion issue a performance warranty against moisture penetration on all waterproofed areas.