1. Material, Preparation and Company Designations

- **Product Specifications**

- **Trade name:** ASHFORD FORMULA

- **Manufacturer/Supplier:** Curecrete Chemical Company  
  1201 West Spring Creek Place  
  Springville, Utah 84663 USA  
  Ph: +1.801.489.5663  
  www.ashfordformula.com

- **For information contact** Curecrete Chemical Company

- **In an emergency contact** PERS, call collect +1.801.629.0667

2. Composition / Component Specification

- **Chemical designation:** Catalytically modified inorganic sodium silicate solution

- **Composition / component information:**

<table>
<thead>
<tr>
<th>Weight-%</th>
<th>CAS –Nr.</th>
<th>Chemical name:</th>
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<tr>
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<td>1344-09-8</td>
<td>Sodium silicate</td>
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<table>
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<th>Index –Nr.</th>
<th>EU –Nr.</th>
<th>Symbol(s)</th>
<th>Warning signs</th>
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<tbody>
<tr>
<td>none</td>
<td>215-687-4</td>
<td>Si O₂/Na₂ O</td>
<td>R 36/37/38</td>
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</table>

- **Other information :** Rest: water

3. Possible Hazards

This product is not a hazardous material pursuant to the chemicals law and the hazardous materials regulation of 10-26-1993.
4. First Aid Actions

- **Symptoms and effects:** No known typical symptoms and effects

- **First aid:**

  **General:** When in doubt or when symptoms persist, medical treatment is required.

  **Inhaling:** Unlikely. Expose to fresh air.

  **Skin:** Immediately wash off with soap and water. Medical treatment may be indicated.

  **Eyes:** Rinse thoroughly with plenty of water. To ensure effective rinse pull away eye lids from eyeball. Medical treatment.

  **Swallowing:** Do not induce vomiting. Rinse mouth, have patient drink large volume of water or milk.

- **Advice to the physician:** High pH, caustic

5. Fire Fighting Actions

- **Fire extinguishing agents:** Not relevant: Product is not flammable

- **Unsafe fire extinguishing agents:** None are known.

- **Specific hazards:** None are known.

- **Hazardous decomposition products (combustion products):** None are known

- **Protective gear:** No specific suggestions
6. Action in Case of Unintentional Release

**Personal precautions:** Avoid contact with eyes and skin. Refer to Section 8 for personal protective measures.

**Environmental protective measures:** Do not allow drainage into storm drains or waterways. The diluted reaction product, following reaction on the concrete surface, is generally recognized as safe.

**Mopping up procedure:** Collect as much as possible in a container for reuse (preferable) or disposal according to local regulations. Sweep up the remainder with a liquid absorbing material such as sand, sawdust or vermiculite, and put it in a container for disposal, or dilute it with water on concrete surfaces.

7. Handling and Storage

**Handling:** Do not inhale atomized mist. Avoid contact with skin, eyes and clothing. Comply with the usual precautionary measures when handling chemicals. Refer to Section 8 for personal protective measures.

**Protection against fire and explosion:** No specific suggestions.

**Storage requirements:** Protect product against freezing. Store product at temperatures below 70 °C (158 °F). When not in use, keep product closed in the original container. Store in factory provided containers only.

**Other information:** Refer to “Storage Requirements” and Chapter 10 for materials used for installations and equipment.

**NR - 7- storage class (07):** Storage class 12 – Non-flammable liquids (VCI - concept)
8. Limits of Exposure and Personal Protective Gear.

**Technical protective measures:** Use low-pressure sprayer. Do not atomize. If generating aerosol cannot be avoided, provide adequate ventilation and exhaust in the work area.

**Component limit to be monitored in the work area**

A component limit has not determined.

**Personal protective gear**

- **Breathing organs:** Use protective breathing equipment in case of atomization and insufficient ventilation.

- **Hands:** Wear suitable protective gloves in case of direct skin exposure.

- **Eyes:** Wear protective goggles in case of spray hazard, e.g. when transferring product to other containers.

- **Skin and body:** Wear suitable protective clothing when handling the product.

9. Physical and Chemical Properties

- **Appearance:** Viscous liquid
- **Color:** Clear
- **Odor:** Odorless
- **Boiling point/range:** 110°C (230 °F)
- **Melting point / range:** Not determined
- **Ignition point:** Not flammable
- **Inflammability / inflammation temperature:** Not applicable
- **Spontaneous ignition:** Not flammable
- **Explosion hazard:** Not determined
- **Explosion limits:** Not determined
- **Combustion promoting properties:** Not applicable
- **Vapor pressure:** Approx. 2.3 kPa (25°C [77 °F]) (same as water)
- **Density:** 1.1889 g/cm³
- **Bulk density:** Not applicable
- **Solubility in water:** Completely soluble
- **Solubility in other solvents:** Not determined
- **pH–value:** 11.3 – 11.6
- **Distribution coefficient:** Not determined
- **n –octanol / water:** Not determined
- **Relative vapor density (air =1):** Not determined
- **Viscosity:** Not determined
10. Stability and Reactivity

Stability: The product is stable.

Conditions to be avoided: None

Materials to be avoided: Reacts with aluminum and other light metals and their alloys, with zinc and tin by forming hydrogen peroxide which, together with air, can form explosive mixtures. The product adheres to and etches glass walls. The product decomposes when mixed with acids releasing silicic acid.

Hazardous decomposition products: None known

11. Toxicological Specification

Name: Inorganic silicate

Acute toxicity
Oral LD50: Rat: > 2000 mg/kg (Lit.)
Dermal LD50: No data available
Inhaling LC50: No data available

Irritation
Skin: Mild skin irritant, but not sufficient to justify classification
Eyes: Eye irritant, but not sufficient to justify classification
Sensitization: Not sensitizing (Lit.)
Genetic toxicity: Does not cause mutations (in vitro) (Lit.)
Other toxicological information: Not carcinogenic (Lit.)
Ecological Specifications

The preparation has not been tested ecologically. The test results below apply to the following materials contained in the product.

Name: Inorganic silicate

Eco-toxicological effect

Fish: 96h-LC50 (Brachydanio rerio, OECD no.203): 3185 mg/l (pH < 10.3) (Lit.)
Lower effect threshold (NOEL) (Brachydanio rerio): >=1000 mg/l (Lit.)
96h-LC50 (Lepomis macrochirus): > 301 mg/l (Lit.)

Daphnia: 96h-EC50 (Daphnia magna): >216 mg/l (Lit.)
100h-EC50 (Daphnia magna): 247 mg/l (Lit.)

Bacteria: 30 min-EC0 (Pseudomonas putida, OECD no. 209): >1000 mg/l (Lit.)
18h-EC0 (Daphnia magna): >10000 mg/l (pH 6.88) (Lit.)
18h-ECO (Daphnia magna): >1000 mg/l (pH > 9) (Lit.)

Behavior in the environment:
Non-biological degradation: Hydrolyzed in an aqueous solution with a pH value of < 9
The silicate is 120 mg/l at this pH.

Biological degradation: Not applicable (inorganic product)

Bio-accumulation: No danger of bio-accumulation.
Silicon compounds such as silicates are metabolically used by algae and plants without being accumulated.

Miscellaneous: The information on endangering water organisms is caused by the increase in pH value.
If the product is not neutralized, it can become toxic to water organisms due to its basicity.
13. Disposal Notes

**Product:**
Dispose in compliance with local regulations.

**Contaminated packaging:**
Containers that cannot be cleaned shall be disposed of in the same manner as the product.

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Other information: Not a hazardous material pursuant to national and international shipping regulations.

**Ocean shipment**

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Other information: Not a hazardous material according to national and international shipping regulations

**Air shipment**

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Other information: Not a hazardous material according to national and international shipping regulations
15. Regulations

Chem. description: Inorganic silicate, solution

Designation acc. to EU directives:

EU number: Not applicable

Classification on the basis of:
Symbols:
R –rates: None
S –rates: None

Other information: None

Water endangering class (WGK): (Self classification), mildly water endangering

Notifications regarding occupational restrictions: Labor law for the protection of children and young people par. 22

Emergency regulations: Not mentioned in the appendixes

Technical instructions pertaining to air: Class III (self classification)

16. Other Specifications

This information is based on current state-of-knowledge, and is presented in good faith but without any guarantee. It is the responsibility of the user to ensure that the information is complete and suitable for the specific intended use.