1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name
Enviro Klean® SafRestorer

Other means of identification
Product Code(s) 41016
UN number UN1760

Recommended use of the chemical and restrictions on use
Recommended use Restricted to professional users.
Uses advised against No information available

Details of the supplier of the safety data sheet
Manufacturer Address
PROSOCO, Inc.
3741 Greenway Circle
Lawrence, Kansas 66046

Emergency telephone number
8:00 AM – 5:00 PM CST Monday-Friday 785-865-4200
NON-BUSINESS HOURS (INFOTRAC) 800-535-5053

2. HAZARDS IDENTIFICATION

Classification
Skin corrosion/irritation Category 1 Sub-category B
Serious eye damage/eye irritation Category 1
Reproductive toxicity Category 1B

Label elements

Emergency Overview

Danger

Hazard statements
Causes severe skin burns and eye damage
May damage fertility or the unborn child

Appearance clear Physical state Liquid Odor Mild

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response  
immediately call a POISON CENTER or doctor/physician  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
immediately call a POISON CENTER or doctor/physician  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
immediately call a POISON CENTER or doctor/physician  
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage  
Store locked up

Precautionary Statements - Disposal  
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)  
Other information  
Burns from this product may not be immediately painful or evident. Exposures require fluoride specific treatment  
• May be harmful if swallowed  
No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40 - 70</td>
<td>*</td>
</tr>
<tr>
<td>Glycolic Acid</td>
<td>79-14-1</td>
<td>10 - 30</td>
<td>*</td>
</tr>
<tr>
<td>sulfamic acid</td>
<td>5329-14-6</td>
<td>7 - 13</td>
<td>*</td>
</tr>
<tr>
<td>Ammonium Hydrogen Fluoride</td>
<td>1341-49-7</td>
<td>1 - 5</td>
<td>*</td>
</tr>
<tr>
<td>Quaternary amine compound</td>
<td>Proprietary</td>
<td>1 - 5</td>
<td>*</td>
</tr>
<tr>
<td>Ethoxylated alcohol</td>
<td>Proprietary</td>
<td>1 - 5</td>
<td>*</td>
</tr>
<tr>
<td>Methoxyacetic acid</td>
<td>625-45-6</td>
<td>0.1 - 1</td>
<td>*</td>
</tr>
</tbody>
</table>

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice  
Immediate medical attention is required.

Eye contact  
Keep eye wide open while rinsing. Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. Rinse the eyes with a calcium gluconate 1% solution.

Skin Contact  
Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediately apply calcium gluconate gel 2.5% and massage into the affected area using rubber gloves; continue to massage while repeatedly applying gel until 15 minutes after pain is relieved.

Inhalation  
Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion  
Immediate medical attention is required. Do NOT induce vomiting. Never give anything by
mouth to an unconscious person. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.

**Self-protection of the first aider**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**

Burns from this product may not be immediately painful or evident. Exposures require fluoride specific treatment. The product causes burns of eyes, skin and mucous membranes.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

---

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

**Environmental precautions**

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment**

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up**

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

---

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation,
wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Incompatible materials
Incompatible with strong acids and bases. Incompatible with oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydrogen Fluoride 1341-49-7</td>
<td>TWA: 2.5 mg/m³ F</td>
<td>TWA: 2.5 mg/m³ F</td>
<td>TWA: 2.5 mg/m³ F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 2.5 mg/m³ F</td>
<td>(vacated) TWA: 2.5 mg/m³</td>
</tr>
</tbody>
</table>

NIOSH IDLH Immediately Dangerous to Life or Health

Other information
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls
Brush on or apply at the lowest practical pressure. Do not atomize during application. Beware of wind drift. Proper work practices and planning should be utilized to avoid contact with workers, passersby, and non-masonry surfaces. Application equipment, scaffolding, swing stages and support systems must be constructed of acid resistant materials.

Individual protection measures, such as personal protective equipment

Eye/face protection
Tight sealing safety goggles. Face protection shield.

Skin and body protection
Wear protective gloves and protective clothing.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state
Liquid

Appearance
Clear

Color
Light yellow

Odor
Mild

Odor threshold
No information available

Property
pH
2.9

Melting point / freezing point °F
No information available

Boiling point / boiling range
-2 °C / 28 °F

Flash point
Not Applicable
10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to avoid
Strong bases.

Incompatible materials
Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous decomposition products
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Causes burns Corrosive

Inhalation
Avoid breathing vapors or mists. May be harmful if inhaled.

Eye contact
Causes serious eye damage.

Skin Contact
Causes burns. Burns from this product may not be immediately painful or evident. Exposures require fluoride specific treatment.

Ingestion
Do not taste or swallow. Harmful if swallowed.

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LD50/Oral</th>
<th>LD50/Dermal</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>&gt; 90 mL/kg ( Rat )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7732-18-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycolic Acid</td>
<td>= 1950 mg/kg ( Rat )</td>
<td></td>
<td>= 7.7 mg/L ( Rat ) 4 h</td>
</tr>
<tr>
<td>79-14-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sulfamic acid</td>
<td>= 1450 mg/kg ( Rat )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5329-14-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ammonium Hydrogen Fluoride
1341-49-7
= 130 mg/kg (Rat)

Quaternary amine compound
= 580 mg/kg (Rat)

Ethoxylated alcohol
= 1378 mg/kg (Rat)
> 2 g/kg (Rabbit)

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms
Burns from this product may not be immediately painful or evident. Exposures require fluoride specific treatment.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity
No information available.

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

<table>
<thead>
<tr>
<th>ATEmix (oral)</th>
<th>ATEmix (dermal)</th>
<th>ATEmix (inhalation-dust/mist)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3310 mg/kg</td>
<td>160000 mg/kg mg/l</td>
<td>48.6 mg/l</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycolic Acid</td>
<td>79-14-1</td>
<td>-</td>
<td>5000: 96 h Brachydanio rerio mg/L LC50 static</td>
<td>-</td>
</tr>
<tr>
<td>sulfamic acid</td>
<td>5329-14-6</td>
<td>-</td>
<td>14.2: 96 h Pimephales promelas mg/L LC50 static</td>
<td>-</td>
</tr>
</tbody>
</table>

Persistence and degradability
No information available.

Bioaccumulation
No information available.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycolic Acid</td>
<td>-1.11</td>
</tr>
</tbody>
</table>

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Do not reuse container.
14. TRANSPORT INFORMATION

DOT
Regulated
UN number
UN1760
UN proper shipping name
Corrosive liquid, n.o.s. (Hydroxyacetic & Sulfamic Acid)
Transport hazard class(es)
8
Packing group
II

15. REGULATORY INFORMATION

International Inventories
TSCA
Complies
DSL/NDSL
Complies
Legend:
- United States Toxic Substances Control Act Section 8(b) Inventory
- Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydrogen Fluoride - 1341-49-7</td>
<td>1341-49-7</td>
<td>1 - 5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories
- Acute health hazard: Yes
- Chronic Health Hazard: Yes
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydrogen Fluoride - 1341-49-7</td>
<td>100 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydrogen Fluoride - 1341-49-7</td>
<td>100 lb</td>
<td>-</td>
<td>RQ 100 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 45.4 kg final RQ</td>
</tr>
</tbody>
</table>

US State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>sulfamic acid 5329-14-6</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonium Hydrogen Fluoride 1341-49-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Formic acid 64-18-6</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA
Health hazards 3  Flammability 0  Instability 0  Physical and chemical properties -

HMIS
Health hazards 3  Flammability 0  Physical hazards 0  Personal protection X

Prepared By   Regulatory Department
Issuing Date  07-Jan-2015
Revision date 19-Jul-2019
Revision Note SDS sections updated
4 7 11

Disclaimer
The information contained on the Safety Data Sheet has been compiled from data considered accurate. This data is believed to be reliable, but it must be pointed out that values for certain properties are known to vary from source to source. PROSOCO, Inc. expressly disclaims any warranty express or implied as well as any liability for any injury or loss arising from the use of this information or the materials described. This data is not to be construed as absolutely complete since additional data may be desirable when particular conditions or circumstances exist. It is the responsibility of the user to determine the best precautions necessary for the safe handling and use of this product for his unique application. This data relates only to the specific material designated and is not to be used in combination with any other material. Many federal and state regulations pertain directly or indirectly to the product's end use and disposal of containers and unused material. It is the purchaser's responsibility to familiarize himself with all applicable regulations.

End of Safety Data Sheet