

SAFETY DATA SHEET

PROSOCO, Inc.



PROSOCO
Version 2

Issue Date 19-Jan-2015

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

Product identifier

Product Name Enviro Klean®
EK Restoration Cleaner

Other means of identification

Product Code 41006
UN/ID No UN2922

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

| | |
|-----------------------------------|---------------------------|
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Dermal | Category 3 |
| Skin corrosion/irritation | Category 1 Sub-category C |
| Serious eye damage/eye irritation | Category 1 |

Label elements

Emergency Overview

Danger

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

Hazard statements

Harmful if swallowed
Toxic in contact with skin
Causes severe skin burns and eye damage



Appearance clear

Physical state Liquid

Odor No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
Specific treatment (see TREATMENT FOR HYDROFLUORIC ACID EXPOSURE on this label)
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: Call a POISON CENTER or doctor/physician if you feel unwell
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
7.125% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% | Trade Secret |
|--|------------|----------|--------------|
| Water | 7732-18-5 | 60 - 100 | * |
| Ammonium Hydrogen Fluoride | 1341-49-7 | 7 - 13 | * |
| Glycolic Acid | 79-14-1 | 1 - 5 | * |
| 1-Dedecanamine, N, N-dimethyl-,N-Oxide | 1643-20-5 | 1 - 5 | * |
| Cocamidopropyl betaine | 61789-40-0 | 1 - 5 | * |
| Ammonium hydroxide | 1336-21-6 | 1 - 5 | * |

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

4. FIRST AID MEASURES

First aid measures

General advice

Immediate medical attention is required.

Eye contact

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

Skin Contact

Immediate medical attention is required. Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. 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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. 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. |
|---------------------------|---|

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

Environmental precautions

| | |
|----------------------------------|--|
| 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 | Use personal protective equipment as required. Dam up. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. |
|--------------------------------|--|

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep out of the reach of children. Keep container tightly closed in a dry 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

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|------------------------------|--|---|
| Ammonium Hydrogen Fluoride 1341-49-7 | TWA: 2.5 mg/m ³ F | TWA: 2.5 mg/m ³ F TWA: 2.5 mg/m ³ dust (vacated) TWA: 2.5 mg/m ³ | TWA: 2.5 mg/m ³ F |
| Ammonium hydroxide 1336-21-6 | STEL: 35 ppm TWA: 25 ppm | TWA: 50 ppm TWA: 35 mg/m ³ (vacated) STEL: 35 ppm (vacated) STEL: 27 mg/m ³ | IDLH: 300 ppm TWA: 25 ppm TWA: 18 mg/m ³ STEL: 35 ppm STEL: 27 mg/m ³ |

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 Showers
Eyewash stations
Ventilation systems. 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. Take off all contaminated clothing

and wash it before reuse. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-------------------------------------|--------------------------|-------------------------|--------------------------|
| Physical state | Liquid | Odor | No information available |
| Appearance | clear | Odor threshold | No information available |
| Color | amber | | |
| Property | Values | Remarks • Method | |
| pH | 5.5 | | |
| Melting point/freezing point | No information available | | |
| Boiling point/boiling range | No information available | | |
| Flash point | | Not Applicable | |
| Evaporation rate | No information available | | |
| Flammability (solid, gas) | No information available | | |
| Flammability Limits in Air | | | |
| Upper flammability limits | No information available | | |
| Lower flammability limit | No information available | | |
| Vapor pressure | No information available | | |
| Vapor density | No information available | | |
| Specific Gravity | 1.06 | | |
| Water solubility | | | |
| Solubility in other solvents | No information available | | |
| Partition coefficient | No information available | | |
| Autoignition temperature | No information available | | |
| Decomposition temperature | No information available | | |
| Kinematic viscosity | No information available | | |
| Dynamic viscosity | No information available | | |
| Explosive properties | Not an explosive | | |
| Oxidizing properties | 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

Exposure to air or moisture over prolonged periods.

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 | Corrosive Fatal if swallowed Fatal in contact with skin May be fatal if inhaled |
| Inhalation | Avoid breathing vapors or mists. Poison - may be fatal if inhaled. |

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact May be fatal if absorbed through skin. Burns from this product may not be immediately painful or evident. Exposures require fluoride specific treatment.

Ingestion May be fatal if swallowed.

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|-------------|------------------------|
| Water 7732-18-5 | > 90 mL/kg (Rat) | - | - |
| Ammonium Hydrogen Fluoride 1341-49-7 | = 130 mg/kg (Rat) | - | - |
| Glycolic Acid 79-14-1 | = 1950 mg/kg (Rat) | - | = 7.7 mg/L (Rat) 4 h |
| Cocamidopropyl betaine 61789-40-0 | = 4900 mg/kg (Rat) | - | - |
| Ammonium hydroxide 1336-21-6 | = 350 mg/kg (Rat) | - | - |

Information on toxicological effects

Symptoms The product causes burns of eyes, skin and mucous membranes. 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. This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.
Target Organ Effects Eyes, Respiratory system, Skin.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 7.125% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral) 1025 mg/kg
ATEmix (dermal) 66489 mg/kg
ATEmix (inhalation-gas) 142450 mg/l
ATEmix (inhalation-dust/mist) 71.5 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--------------------------|----------------------|---|----------------------------|-------------------------|
| Glycolic Acid 79-14-1 | - | 5000: 96 h Brachydanio rerio mg/L LC50 static | - | - |
| Cocamidopropyl betaine | 1.0 - 10.0: 72 h | 1.0 - 10.0: 96 h Brachydanio | - | 6.5: 48 h Daphnia magna |

| | | | | |
|---------------------------------|---|---|---|--|
| 61789-40-0 | Desmodemus subspicatus mg/L EC50 0.55: 96 h Desmodemus subspicatus mg/L EC50 | erio mg/L LC50 2: 96 h Brachydanio erio mg/L LC50 semi-static | | mg/L EC50 |
| Ammonium hydroxide 1336-21-6 | - | 8.2: 96 h Pimephales promelas mg/L LC50 | - | 0.66: 48 h water flea mg/L EC50 0.66: 48 h Daphnia pulex mg/L EC50 |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|--------------------------|-----------------------|
| Glycolic Acid 79-14-1 | -1.11 |

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.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOT

| | |
|----------------------|---|
| UN/ID No | Regulated UN2922 |
| Proper shipping name | Corrosive, liquid, toxic, n.o.s. (Ammonium Bifluoride & Hydroxyacetic acid) |
| Hazard Class | 8 |
| Subsidiary class | (6.1) |
| Packing Group | III |

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDSL Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - 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

| Chemical Name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|--|-----------|----------|-------------------------------|
| Ammonium Hydrogen Fluoride - 1341-49-7 | 1341-49-7 | 7 - 13 | 1.0 |
| Ammonium hydroxide - 1336-21-6 | 1336-21-6 | 1 - 5 | 1.0 |

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)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|-----------------------------|------------------------|---------------------------|----------------------------|
| Ammonium Hydrogen Fluoride 1341-49-7 | 100 lb | - | - | X |
| Ammonium hydroxide 1336-21-6 | 1000 lb | - | - | X |

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)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---|--------------------------|----------------|---|
| Ammonium Hydrogen Fluoride 1341-49-7 | 100 lb | - | RQ 100 lb final RQ RQ 45.4 kg final RQ |
| Ammonium hydroxide 1336-21-6 | 1000 lb | - | RQ 1000 lb final RQ RQ 454 kg final RQ |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| Ammonium Hydrogen Fluoride 1341-49-7 | X | X | X |
| Ammonium hydroxide 1336-21-6 | X | X | X |

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 |

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 SDS sections updated 3 8 11 15

Disclaimer

The information contained on the Material 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