SAFETY DATA SHEET PROSOCO, Inc.



Issue Date 19-Jan-2015 Revision Date 12-May-2015

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 NON-BUSINESS HOURS (INFOTRAC) 785-865-4200 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 aiderUse 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

contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautionsDo 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/m³ F	TWA: 2.5 mg/m³ F TWA: 2.5 mg/m³ dust (vacated) TWA: 2.5 mg/m³	TWA: 2.5 mg/m³ F
Ammonium hydroxide 1336-21-6	STEL: 35 ppm TWA: 25 ppm	TWA: 50 ppm TWA: 35 mg/m³ (vacated) STEL: 35 ppm (vacated) STEL: 27 mg/m³	IDLH: 300 ppm TWA: 25 ppm TWA: 18 mg/m³ STEL: 35 ppm STEL: 27 mg/m³

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.

Not Applicable

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateLiquidAppearanceClearOdorNo information availableColoramberOdor thresholdNo information available

Property Values Remarks • Method

pH 5.5

Melting point/freezing pointNo information availableBoiling point/boiling rangeNo information available

Flash point

Evaporation rateFlammability (solid, gas)
No information available
No information available

Flammability Limits in Air

Upper flammability limits
Lower flammability limit
Vapor pressure
Vapor density

No information available
No information available
No information available
No information available

Specific Gravity 1.06

Water solubility

Solubility in other solvents No information available No information available **Partition coefficient Autoignition temperature** No information available **Decomposition temperature** No information available Kinematic viscosity No information available **Dynamic viscosity** No information available Not an explosive **Explosive properties 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 Germ cell mutagenicityNo information available.
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
STOT - single exposure
STOT - repeated exposure
No information available.
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

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61789-40-0	Desmodesmus subspicatus mg/L EC50 0.55: 96 h Desmodesmus subspicatus mg/L EC50	rerio mg/L LC50 2: 96 h Brachydanio rerio 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	-1.11
79-14-1	

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 Regulated UN/ID No 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	-	-	Х

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	100 lb	-	RQ 100 lb final RQ
1341-49-7			RQ 45.4 kg final RQ
Ammonium hydroxide	1000 lb	-	RQ 1000 lb final RQ
1336-21-6			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

Prepared By Regulatory Department

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 12-May-2015

Revision Note

SDS sections updated 3 8 11 15

<u>Disclaimer</u>

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