SAFETY DATA SHEET PROSOCO, Inc.



Issue Date 07-Jan-2015 Revision Date 14-Jul-2015

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

Product identifier

Product Name Enviro Klean® SafRestorer

Other means of identification

Product Code 41016 UN/ID No 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

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: 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

Chemical Name	CAS No	Weight-%	Trade Secret
Water	7732-18-5	40 - 70	*
Glycolic Acid	79-14-1	10 - 30	*
sulfamic acid	5329-14-6	7 - 13	*
Ammonium Hydrogen Fluoride	1341-49-7	1 - 5	*
Quaternary amine compound	Proprietary	1 - 5	*
Ethoxylated alcohol	Proprietary	1 - 5	*
Methoxyacetic acid	625-45-6	0.1 - 1	*

^{*} 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 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.

Immediate medical attention is required. 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 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

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 Dam up. Soak up with inert absorbent material. Prevent product from entering drains. Pick

up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handlingUse 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 containers tightly closed in a dry, cool and well-ventilated place. Keep in properly

labeled containers. Keep out of the reach of children.

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

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 ControlsBrush 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 Appearance clear

Appearance clear Odor Mild

Color light yellow Odor threshold No information available

Property Values Remarks • Method

pH 2.9

Melting point/freezing point No information available

Not Applicable

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

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

Specific Gravity 1.11

Water solubility completely soluble
Solubility in other solvents
Partition coefficient
Autoignition temperature
Decomposition temperature
Kinematic viscosity
No information available

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. Heat. 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 Causes burns Corrosive

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

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

Skin ContactCauses 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

Component information			
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Glycolic Acid 79-14-1	= 1950 mg/kg (Rat)	-	= 7.7 mg/L (Rat) 4 h
sulfamic acid 5329-14-6	= 1450 mg/kg (Rat)	-	-
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)	-

Information on toxicological effects

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

SensitizationNo 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
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.

Aspiration hazard Risk of serious damage to the lungs (by aspiration).

Numerical measures of toxicity - Product Information

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

ATEmix (oral) 3310 mg/kg

ATEmix (dermal) 160000 mg/kg mg/l

ATEmix (inhalation-dust/mist) 48.6 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	-	-
sulfamic acid 5329-14-6	-	14.2: 96 h Pimephales promelas mg/L LC50 static	-	-

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 UN1760

Proper shipping name Corrosive liquid, n.o.s. (Hydroxyacetic & Sulfamic Acid)

Hazard Class 8
Packing Group

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	1 - 5	1.0

SARA 311/312 Hazard Categories

Acute health hazard
Chronic Health Hazard
Fire hazard
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	100 lb	-	-	Χ
Fluoride				
1341-49-7				

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

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
sulfamic acid 5329-14-6	Х	-	-
Ammonium Hydrogen Fluoride 1341-49-7	X	X	X
Formic acid 64-18-6	Х	Х	Х

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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Revision Note SDS sections updated

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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