## SAFETY DATA SHEET



Issuing Date 19-Jan-2015 Revision date 20-Nov-2024

## 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(s) 41006 UN number UN2922

Recommended use of the chemical and restrictions on use

Recommended use
Uses advised against
Restricted to professional users.
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 4% 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	*
Hydroxyacetic 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	*

<sup>\*</sup> 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. Remove contaminated clothing and shoes. Wash

off immediately with plenty of water. 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 Call a physician or poison control center immediately. Do NOT induce vomiting. Never give

anything by mouth to an unconscious person. Rinse mouth. Drink plenty of water.

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. Avoid contact with skin, eyes or clothing.

Evacuate personnel to safe areas. 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. 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

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 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** 

	Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ammonium Hydrogen Fluoride		TWA: 2.5 mg/m <sup>3</sup> F	TWA: 2.5 mg/m <sup>3</sup> F	IDLH: 250 mg/m <sup>3</sup> F
	1341-49-7	_	(vacated) TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup> F
Г	Ammonium hydroxide	STEL: 35 ppm	TWA: 50 ppm	IDLH: 300 ppm
	1336-21-6	TWA: 25 ppm	TWA: 35 mg/m <sup>3</sup>	TWA: 25 ppm
			(vacated) STEL: 35 ppm	TWA: 18 mg/m <sup>3</sup>
			(vacated) STEL: 27 mg/m <sup>3</sup>	STEL: 35 ppm
				STEL: 27 mg/m <sup>3</sup>

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. Wear suitable gloves and eye/face

protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 41006 Enviro Klean® **EK Restoration Cleaner**

#### Information on basic physical and chemical properties

**Physical state** Liquid **Appearance** clear

Odor No information available Color amber **Odor threshold** No information available

Not Applicable

Property Values Remarks • Method

5.5 Ha

Melting point / freezing point °F No information available No information available

Boiling point / boiling range Flash point

**Evaporation rate** No information available

Flammability (solid, gas) No information available Flammability Limit in Air

Upper flammability limit: No information available No information available Lower flammability limit: 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**

Strong bases. 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

Corrosive **Product Information** 

Inhalation Avoid breathing vapors or mists.

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

**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	Chemical name LD50/Oral		Inhalation LC50
Water > 90 mL/kg (Rat) 7732-18-5			
Ammonium Hydrogen Fluoride 1341-49-7	= 130 mg/kg (Rat)		
Hydroxyacetic Acid 79-14-1	= 1950 mg/kg (Rat)		= 3.6 mg/L (Rat) 4 h > 5.2 mg/L ( Rat) 4 h
Cocamidopropyl betaine 61789-40-0	> 10000 mg/kg (Rat)	> 2000 mg/kg ( Rabbit )	
Ammonium hydroxide 1336-21-6	= 350 mg/kg (Rat)		

#### Symptoms related to the physical, chemical and toxicological characteristics

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.

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
No information available.

#### Numerical measures of toxicity - Product Information

**Unknown acute toxicity** 4% 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)
 1051 mg/kg

 ATEmix (dermal)
 86108 mg/kg

 ATEmix (inhalation-gas)
 142450 mg/l

 ATEmix (inhalation-dust/mist)
 38.1 mg/l

## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydroxyacetic Acid 79-14-1	-	5000: 96 h Brachydanio rerio mg/L LC50 static	-	-
1-Dedecanamine, N, N-dimethyl-,N-Oxide 1643-20-5	-	134: 96 h Danio rerio mg/L LC50 semi-static	-	-
Cocamidopropyl betaine 61789-40-0	1.0 - 10.0: 72 h Desmodesmus subspicatus mg/L EC50	1.0 - 10.0: 96 h Brachydanio rerio mg/L LC50 2: 96 h Brachydanio rerio mg/L LC50 semi-static	-	6.5: 48 h Daphnia magna mg/L EC50
Ammonium hydroxide 1336-21-6	-	8.2: 96 h Pimephales promelas mg/L LC50	-	0.66: 48 h Daphnia pulex mg/L EC50 0.66: 48 h water flea mg/L EC50

#### Persistence and degradability

No information available.

#### **Bioaccumulation**

No information available.

Chemical name	Partition coefficient
Hydroxyacetic 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.

## 14. TRANSPORT INFORMATION

DOT Regulated UN 2922

**UN proper shipping name**Corrosive, liquid, toxic, n.o.s. (Ammonium Bifluoride & Hydroxyacetic acid)

Transport hazard class(es) 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 %

# 41006 Enviro Klean® EK Restoration Cleaner

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 No
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
ı	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 -

Health hazards 3 Flammability 0 Physical hazards 0 Personal protection X

Prepared By Regulatory Department

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**Revision Note** 

SDS sections updated 4 6 8

#### **Disclaimer**

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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**