SAFETY DATA SHEET

Issue Date: 01/02/2016

1. IDENTIFICATION

Product Identifier

Product Name Aluminum Brightener

Other means of identification

SDS # CVC-001

UN/ID No UN1786

Recommended use of the chemical and restrictions on use
Recommended Use
Aluminum brightener.

Details of the supplier of the safety data sheet

Manufacturer Address

GoKlean Products LLC. 1220 Biscayne Blvd. DeLand, FL 32724

Ph: 386-943-4171

Emergency Telephone Number

386-873-5075

2. HAZARDS IDENTIFICATION

Appearance Clear, colorless liquid Physical State Liquid Odor Pungent

Classification

Acute toxicity - Oral	Category 2
Acute toxicity - Dermal	Category 1
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Signal Word Danger

Hazard Statements

Fatal if swallowed
Fatal in contact with skin
Fatal if inhaled
Causes severe skin burns and eye damage



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 get in eyes, on skin, or on clothing

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear respiratory protection

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

Immediately call a poison center or doctor/physician

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: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Do not induce vomiting

<u>Precautionary Statements - Storage</u>

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Please also refer to subsequent sections of this SDS for additional information regarding the components of this product.

Chemical Name	CAS No	Weight-%
Sulfuric acid	7664-93-9	<15
Hydrofluoric acid	7664-39-3	<15

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

General Advice Overexposure may produce hypocalcaemia therefore systemic administration of calcium

gluconate may be necessary.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Immediately call a poison center or

doctor/physician.

Skin Contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Get medical attention immediately.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Call a physician or

poison control center immediately.

Page 2/8

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. IF SWALLOWED: call a poison

control center or physician immediately.

Most important symptoms and effects

Symptoms Fatal if inhaled. May cause redness, pain, and severe skin burns. Causes severe skin burns

and eye damage. Blindness may occur. May cause irritation to the mucous membranes and

Revision Date: 01/02/2016

upper respiratory tract.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Eyes: Hold eye lids apart and flood eyes with running water for at least 15 minutes. A 1%

calcium gluconate solution should be used to wash eyes for 15 minutes and then instilled every 2-3 hours. A physician, or preferably an eye specialist should be called immediately. Skin: painful detection may be delayed, If suspected contact, treat as contact. Wash effected area of the skin with copious amounts of water. A calcium gluconate gel (2.5%) or

a 1% zephrine chloride wash should be rubbed in until pain has subdued.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Contact with alkalis and metals may evolve flammable hydrogen gas. Emits toxic fumes under fire conditions.

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. Wear impervious to strong alkaline protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required. Wash face, hands, and any exposed skin

thoroughly after handling. Wear self-contained breathing apparatus (SCBA).

Environmental Precautions 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. Contain and absorb with suitable

absorbent for disposal.

Methods for Clean-Up Sweep up absorbed material and shovel into suitable containers for disposal. Discard any

product, residue, disposable container or liner in full compliance with federal, state, and

local regulations. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Do not breathe

dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Use personal protection

recommended in Section 8. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Wear

Revision Date: 01/02/2016

respiratory protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Keep container tightly closed and store in a cool, dry and well-ventilated

place.

Incompatible Materials Alkali. Ammonia. Chlorine bleach. Oxidizers. Alkaline materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrofluoric acid	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F	IDLH: 30 ppm
7664-39-3	S*	TWA: 2.5 mg/m ³ dust	Ceiling: 6 ppm 15 min
	Ceiling: 2 ppm F	(vacated) TWA: 2.5 mg/m ³	Ceiling: 5 mg/m ³ 15 min
		(vacated) STEL: 6 ppm F	TWA: 3 ppm
			TWA: 2.5 mg/m ³
Sulfuric acid	TWA: 0.2 mg/m ³ thoracic	TWA: 1 mg/m ³	IDLH: 15 mg/m ³
7664-93-9	fraction	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³

Appropriate engineering controls

Engineering Controls If vapors are detected, ventilate work area by opening windows and using exhaust fans.

Always work with wind from behind.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use tight fitting, splash proof safety goggles. Contact lenses should not be worn when

handling this material. Face Mask.

Skin and Body Protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact. Wear protective Neoprene™ gloves.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Liquid

AppearanceClear, colorless liquidOdorPungentColorClear ColorlessOdor ThresholdNot determined

Property Values Remarks • Method

pH < 1.0

Melting Point/Freezing Point Not determined

Boiling Point/Boiling Range 104.44 °C / 220 °F

(Water = 1)

Flash Point Not determined

Evaporation Rate > 1.0

Flammability (Solid, Gas) Not determined **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined **Vapor Pressure** Not determined **Vapor Density** Not determined

Specific Gravity 1.095

Water Solubility Completely soluble Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined Not determined **Dynamic Viscosity Explosive Properties** Not determined **Oxidizing Properties** Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Product will react violently with the addition of incompatible materials.

Conditions to Avoid

Incompatible Materials. Keep out of reach of children.

Incompatible Materials

Alkali. Ammonia. Chlorine bleach. Oxidizers. Alkaline materials.

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 Overexposure may produce hypocalcaemia therefore systemic administration of calcium

gluconate may be necessary

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns. Fatal in contact with skin.

Inhalation Fatal if inhaled.

Fatal if swallowed. Ingestion

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrofluoric acid 7664-39-3	-	-	= 0.79 mg/L (Rat) 1 h
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m ³ (Rat) 2 h

NP 9	= 2590 mg/kg (Rat) = 1310 mg/kg	= 1780 µL/kg (Rabbit) = 2 mL/kg	-
	(Rat)	(Rabbit)	

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity Note: The agencies below have listed Strong Inorganic Acid Mists, Containing Sulfuric Acid

as a known carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric acid	A2	Group 1	Known	X
7664-93-9				

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Hydrofluoric acid		660: 48 h Leuciscus idus		270: 48 h Daphnia species
7664-39-3		mg/L LC50		mg/L EC50
Sulfuric acid		500: 96 h Brachydanio rerio		29: 24 h Daphnia magna
7664-93-9		mg/L LC50 static		mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Hydrofluoric acid	-1.4
7664-39-3	

Other Adverse Effects

Not determined

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 Disposal should be in accordance with applicable regional, national and local laws and

regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hydrofluoric acid	U134			U134
7664-39-3				

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status		
Sulfuric acid	Toxic		
7664-93-9	Corrosive		

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT

UN/ID No UN1786

Proper Shipping Name Hydrofluoric acid and Sulfuric acid mixtures

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Sulfuric acid	Present	Х		Present		Present	Х	Present	Χ	Χ
Hydrofluoric acid	Present	Χ		Present		Present	Х	Present	Χ	Х

Legend:

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrofluoric acid	100 lb	100 lb	RQ 100 lb final RQ
7664-39-3			RQ 45.4 kg final RQ
Sulfuric acid	1000 lb	1000 lb	RQ 1000 lb final RQ
7664-93-9			RQ 454 kg final RQ

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 %
Hydrofluoric acid - 7664-39-3	7664-39-3	<15	1.0
Sulfuric acid - 7664-93-9	7664-93-9	<15	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrofluoric acid	100 lb			Χ
Sulfuric acid	1000 lb			Х

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Sulfuric acid - 7664-93-9	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hydrofluoric acid 7664-39-3	Х	X	Х
Sulfuric acid 7664-93-9	X	X	Х

16. OTHER INFORMATION

Health Hazards Flammability Instability **Special Hazards** <u>NFPA</u> Not determined Not determined Not determined Not determined HMIS **Health Hazards Flammability Physical Hazards Personal Protection** 3 0 2 Х

Issue Date: 01-Mar-2005 **Revision Date:** 16-Jul-2015 **Revision Note:** New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet