

SAFETY DATA SHEET



Issue Date 10-Jan-2010

Revision Date 07-Mar-2013

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Aluminum Brightener

Other Means of Identification

SDS # KI-003

UN/ID No NA1760

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Liquid Detergent.

Details of the Supplier of the Safety Data Sheet

Supplier Address

Kemper Industries, Inc.
P.O. Box 1172
2197 Stanton Rd.
Daphne, AL 36526

Emergency Telephone Number

Company Phone Number Handling 251-626-3083
Technical 866-536-4225
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (repeated exposure)	Category 2

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage
May cause damage to organs through prolonged or repeated exposure

**Appearance** Clear liquid**Physical State** Liquid**Odor** Pungent**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face 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
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Get medical attention if necessary
 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)

May be harmful if swallowed

Other Information

- Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	>85
Sulfuric acid	7664-93-9	<10
Ammonium bifluoride	1341-49-7	<3

4. FIRST AID MEASURES

First Aid Measures**General advice**

If exposed or concerned: Get medical advice/attention.

Inhalation

Remove to fresh air. Get medical attention if symptoms persist. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if necessary.

Eye Contact	Immediately flush eyes with gentle but large amount of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.
Ingestion	Do NOT induce vomiting. Rinse mouth thoroughly with water. Dilute by giving a large amount of water. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Call a physician immediately.
Skin Contact	For skin contact flush with large amounts of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms	<p>Eye: May cause severe irritation or burns. Prolonged or repeated eye contact may cause irreversible damage or blindness.</p> <p>Skin: Prolonged contact may cause irritation and corrosion of skin.</p> <p>Inhalation: May cause irritation, coughing, choking, and chills. Breathing large amounts may be harmful.</p> <p>Ingestion: May cause damage to mucous membranes, nausea, vomiting, shock symptoms.</p>
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. Foam. Water spray (fog).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

None known.

Hazardous combustion products None known.

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 breathing vapors, mist or gas. Wash face, hands and any exposed skin thoroughly after exposure or clean-up. Avoid contact with skin, eyes or clothing.
For Emergency Responders	Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Environmental Precautions	See Section 12 for additional ecological information.

Methods and Material for Containment and Cleaning Up

Methods for Containment Small Spill: Absorb liquid on paper, vermiculite, floor absorbent or other absorbent material. Large Spill: Avoid heat. Stop spill at source, dyke area of spill to prevent spreading, pump liquid to salvage tank. If acidity (low pH) is a problem, neutralize with hydrated lime, soda ash, or sodium bicarbonate.

Methods for Cleaning Up For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not take internally. Do not eat, drink or smoke when using this product. Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep from freezing. Keep container closed when not in use. Store locked up.

Incompatible Materials Inorganic base metals/metal blends.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric acid 7664-93-9	TWA: 0.2 mg/m ³ thoracic fraction	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³	IDLH: 15 mg/m ³ TWA: 1 mg/m ³
Ammonium bifluoride 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

Appropriate Engineering Controls

Engineering Controls Local exhaust ventilation recommended. Showers
Eyewash stations
Ventilation systems.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Wear approved safety goggles where a splash hazard exists.

Skin and Body Protection Wear rubber gloves that are chemically resistant to this product. Wear protective gloves and protective clothing.

Respiratory Protection Where excess concentration of product is expected, a NIOSH approved air supplied respirator is advised in absence of proper environmental control.

General Hygiene Considerations Take off all contaminated clothing and wash it before reuse. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid inhalation of contaminant. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Liquid		
Appearance	Clear liquid	Odor	Pungent
Color	Clear	Odor threshold	Not determined
Property	Values	Remarks • Method	
pH	2.0		
Melting point/freezing point	0 °C / 32 °F		
Boiling point/boiling range	100 °C / 212 °F		
Flash point	Not determined		
Evaporation rate	Not determined		
Flammability (solid, gas)	Not determined		
Flammability limits in air			
Upper flammability limits	Not determined		
Lower flammability limit	Not determined		
Vapor pressure	Not determined		
Vapor density	Heavier than air	(Air=1)	
Specific gravity	1.339		
Water solubility	Completely soluble		
Solubility in other solvents	Not determined		
Partition coefficient	Not determined		
Autoignition temperature	Not determined		
Decomposition temperature	Not determined		
Kinematic viscosity	Not determined		
Dynamic viscosity	Not determined		
Explosive properties	Not determined		
Oxidizing Properties	Not determined		

Other Information**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children. Avoid all possible sources of ignition. Avoid acidic metals and acidic materials.

Incompatible Materials

Inorganic base metals/metal blends.

Hazardous Decomposition Products

Oxides of phosphorous.

11. TOXICOLOGICAL INFORMATION**Information on Likely Routes of Exposure****Product Information****Inhalation**

May be harmful if inhaled large amounts.

Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m ³ (Rat) 2 h = 347 ppm (Rat) 1 h
Ammonium bifluoride 1341-49-7	= 130 mg/kg (Rat)	-	-

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. The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric acid 7664-93-9	A2	Group 1	Known	X
Ammonium bifluoride 1341-49-7		Group 3		

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Numerical Measures of Toxicity- Product

Not determined

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

ATEmix (oral) 2321 mg/kg

ATEmix (inhalation-dust/mist) 15 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sulfuric acid 7664-93-9		500: 96 h Brachydanio rerio mg/L LC50 static		29: 24 h Daphnia magna mg/L EC50

Persistence and Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined.

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.

Chemical Name	California Hazardous Waste Status
Sulfuric acid 7664-93-9	Toxic 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 NA1760
Proper Shipping Name Compound, cleaning liquid (Sulfuric Acid)
Hazard Class 8
Packing Group III
Reportable Quantity (RQ) 1000 lbs

IATA

UN/ID No UN1760
Proper Shipping Name Compound, cleaning, liquid, corrosive (Sulfuric Acid)
Hazard Class 8
Packing Group III

IMDG

UN/ID No UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Sulfuric acid)
Hazard Class 8
Packing Group III

15. REGULATORY INFORMATION

International Inventories

TSCA Listed**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***US Federal Regulations**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Sulfuric acid - 7664-93-9	7664-93-9	<10	1.0
Ammonium bifluoride - 1341-49-7	1341-49-7	<3	1.0

SARA 311/312 Hazard Categories

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric acid 7664-93-9	1000 lb			X
Ammonium bifluoride 1341-49-7	100 lb			X

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ
Ammonium bifluoride 1341-49-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

US State Regulations

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

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sulfuric acid 7664-93-9	X	X	X
Ammonium bifluoride 1341-49-7	X	X	X

U.S. EPA Label Information**16. OTHER INFORMATION**

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection
	3	0	2	Not determined

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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