Safety Data Sheet

Issue Date: 14-Feb-2006 **Revision Date:** 12-Aug-2014 **Version** 1

1. IDENTIFICATION

Product Identifier
Product Name Aluminum Brightener

Other means of identification
SDS # RE-002

UN/ID No UN3264

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

Details of the supplier of the safety data sheet
Manufacturer Address
Robbie Enterprises, Inc.
12708 Milwaukee Ave.
Lubbock, TX 79424

Emergency Telephone Number

Company Phone Number (806) 794-4505

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid **Physical State** Liquid **Odor** Acid odor

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Signal Word
Danger

Hazard Statements

Harmful if swallowed
Harmful if inhaled
Causes severe skin burns and eye damage

Precautionary Statements - Prevention
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response
If exposed or concerned: Get medical advice/attention
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

Unknown Acute Toxicity
2.6% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sulfuric Acid	7664-93-9	10-20
Ammonium bifluoride	1341-49-7	10-20

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 If exposed or concerned: Get medical advice/attention.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.

Skin Contact Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician or poison control center immediately.

Ingestion Rinse mouth. Drink high amounts of calcium based antacid in water followed by milk or milk of magnesia. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Most important symptoms and effects

Symptoms Contact will cause irritation and redness to exposed areas. Irritation and corrosive burns to mouth, throat, and stomach. Prolonged contact may even cause severe skin irritation or mild burn.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media Do not use solid water streams.

Specific Hazards Arising from the Chemical
Contact with metals may evolve flammable hydrogen gas. Keep containers cool with water spray to prevent container rupture due to steam buildup.

Hazardous Combustion Products Carbon oxides. Hydrocarbons. Fluorine.

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.

Environmental Precautions Do not discharge into lakes, ponds, streams or public waters.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

Contain and collect with an inert absorbent and place into an appropriate container for disposal. For spills in excess of allowable limits (RQ) notify the National Response Center
(800) 424-8802; refer to 40 CFR 302 for detailed instructions concerning reporting requirements.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Protect container from physical damage. Protect from extreme temperatures.

Packaging Materials

This product will attack glass, concrete, and certain metals.

Incompatible Materials

Strong oxidizing agents. Strong alkalis. Most common metals. Cyanides. Sulfides. Glass. Ceramics.

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

Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear protective gloves and protective clothing. Saranex, Barricade, Chemrel, Responder, or Butyl rubber gloves required. Do not use nitrile rubber, polyvinyl alcohol, or polyvinyl chloride.

Respiratory Protection Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded.

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		
Appearance	Clear liquid	**Odor**	Acid odor
Color	Not determined	**Odor Threshold**	Not determined

Property	**Values**	**Remarks • Method**
pH	~1	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	1.40	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
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
None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid
Extreme temperatures.

Incompatible Materials
Strong oxidizing agents. Strong alkalis. Most common metals. Cyanides. Sulfides. Glass. Ceramics.

Hazardous Decomposition Products
Carbon oxides. Hydrocarbons. Fluorine.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Harmful if inhaled.

Ingestion 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
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.

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 1 - Carcinogenic to Humans

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

NTP (National Toxicology Program) *Known - Known Carcinogen*

OSHA (Occupational Safety and Health Administration of the US Department of Labor) *X - Present*

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 2.6% of the mixture consists of ingredient(s) of unknown toxicity.

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 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/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.

California Hazardous Waste Status

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	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid, Ammonium bifluoride)
Hazard Class	8
Packing Group	II

IATA

UN/ID No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid, Ammonium bifluoride)
Hazard Class	8
Packing Group	II

IMDG

UN/ID No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid, Ammonium bifluoride)
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Not determined

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)
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

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Sulfuric Acid - 7664-93-9	7664-93-9	10-20	1.0
Ammonium bifluoride - 1341-49-7	1341-49-7	10-20	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric Acid 7664-93-9 (10-20)	1000 lb			X
Ammonium bifluoride 1341-49-7 (10-20)	100 lb			X

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
Sulfuric Acid 7664-93-9	X	X	X
Ammonium bifluoride 1341-49-7	X	X	X

16. OTHER INFORMATION

NFPA	**Health Hazards** Not determined	**Flammability** Not determined	**Instability** Not determined	**Special Hazards** Not determined
HMIS	**Health Hazards** 3	**Flammability** 0	**Physical Hazards** 1	**Personal Protection** Not determined

Issue Date:	14-Feb-2006
Revision Date:	12-Aug-2014
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