

# Safety Data Sheet

**Hy-Flo Equipment Co.**  
**PO Box 22**  
**Pittsburg, Kansas 66762**  
**(800) 421-4018**

## Section 1. Chemical Product and Company Identification

**Product Name** Bryte-A-Lume  
**Product Use** Acid  
**Product Code** 3481-BRTALUM  
**Date of Issue** 10/24/14  
**Supersedes** 4/24/12

**Emergency Telephone Numbers**  
**CHEMTREC- 1-800-424-9300**

(For use only in the event of emergencies involving a spill, leak, fire, exposure, or accident involving chemicals)

### Prepared By

C K Enterprises, Inc.  
1204 SW Jefferson Street  
Lee's Summit, Missouri 64081-9899  
(816) 524-1304

## Section 2. Hazards Identification

### Emergency Overview

**DANGER**



### Health Hazards

Acute Toxicity; Oral, Inhalation  
Skin Corrosion/Irritation  
Serious eye damage/ eye irritation

Category 4  
Category 1  
Category 1

### Precautionary Statements:

P210 Keep from freezing  
P233 Keep container tightly closed  
P260 Do not breathe in dust, mist or vapors  
P262 Do not get in eyes, on skin or on clothing  
P264 Wash hands thoroughly after handling  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P401 Store at moderate temperatures

### Hazard Statements:

H302 Harmful if swallowed  
H314 Causes severe skin burns and eye damage  
H332 Harmful if inhaled

### Routes of Entry Dermal, Oral, and Inhalation

### Acute Effects:

**Eyes** Vapors, liquid, and mists are extremely corrosive to the eyes. Brief contact of the vapors will be severely irritating. Brief contact of the liquid or mists can severely damage the eyes, and prolonged contact may cause permanent eye injury, which may be followed by blindness.

**Skin** Vapors, mists, and liquid are extremely corrosive to the skin. Vapors will severely irritate the skin, and liquid and mists will severely burn the skin. Prolonged liquid contact will burn or destroy surrounding tissue.

**Inhalation** Vapors and mists are extremely corrosive to the nose, throat, and mucous membranes. Bronchitis, pulmonary edema, and chemical pneumonitis may occur. Irritation, coughing, chest pain, and difficulty in breathing may occur with brief exposure, while prolonged exposure may result in more severe irritation and tissue damage.

Onset of symptoms may be delayed several hours. Breathing high concentrations (greater than 200 parts per million of nitric acid) for several minutes may result in death 5 to 10 hours later.

**Ingestion** Vapors, mists, and liquid are extremely corrosive to the mouth and throat. Swallowing the liquid burns the tissues, causes severe abdominal pain, nausea, vomiting, kidney damage, and collapse. Swallowing large quantities can cause death.

### Section 3. Composition/Information on Ingredients

<u>Name of Hazardous Ingredients</u>	<u>CAS Number</u>	<u>% by Weight</u>
Hydrogen Fluoride	7664-39-3	<10
Sulfuric Acid	7664-93-9	<5

### Section 4. First Aid Measures

**Eye Contact** Flush immediately with plenty of clean water for at least 15 minutes. Seek immediate medical attention.  
**Skin Contact** Flush immediately with plenty of clean water. If burns or rash develop, seek medical attention.  
**Inhalation** Remove person to fresh air. Begin CPR if breathing has stopped, and seek immediate medical attention.  
**Ingestion** Rinse mouth .DO NOT induce vomiting.. NEVER give anything orally to unconscious persons. Seek immediate medical attention.

### Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A)  
(estimated rating)



**Hazardous Combustion Products** N/A  
**Extinguishing Media** Media applicable to surrounding fire  
**Unsuitable Extinguishing Media** N/A  
**Fire Fighting Procedures** Use protective gear. Use water spray to cool fire-exposed containers.

### Section 6. Accidental Release Measures

**Spill Clean Up** All spilled material must be contained and kept out of waterways, sewers and drains. The spilled chemical should be absorbed with an inert material. Flush cleaned area thoroughly with water.

### Section 7. Handling and Storage

**Handling and Storage** Keep container tightly closed when not in use. Store at moderate temperatures. Do not contaminate. Keep from freezing. Keep out of the reach of children. Have eyewash accessible to use in handling area.

### Section 8. Exposure Controls/Personal Protection

#### Exposure Limits

Product Name	OSHA PEL	NIOSH REL	AIHA WEEL	ACGIH TLV
Hydrogen Fluoride (7664-39-3)	3ppm	3ppm		0.5ppm
Sulfuric Acid (7664-93-9)	1mg/m <sup>3</sup>	1mg/m <sup>3</sup>		0.2mg/m <sup>3</sup>

**Engineering Controls** Local exhaust is normally adequate.



**Personal Protective Equipment (PPE)**

**Eyes** Chemical splash goggles or face shield

**Body** Rubber or neoprene gloves; rubber aprons

**Respiratory** Not usually required. Use NIOSH approved respirator if build-up of mist or vapors is likely.

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid	<b>Explosive Limits</b>	N/A
<b>Color</b>	Clear	<b>Vapor Pressure</b>	N/A
<b>Odor</b>	Slightly acrid	<b>Vapor Density</b>	N/A
<b>Odor Threshold</b>	N/A	<b>Relative Density</b>	N/A
<b>pH</b>	N/A	<b>Solubility</b>	Complete
<b>Freezing Point</b>	N/A	<b>Partition Coefficient</b>	N/A
<b>Boiling Point</b>	N/A	<b>Auto-Ignition Temp.</b>	N/A
<b>Flash Point</b>	Not combustible	<b>Decomposition Temp.</b>	N/A
<b>Evaporation Rate</b>	>1	<b>Viscosity</b>	N/A
<b>Flammability</b>	Non-Flammable	<b>Specific Gravity</b>	1.025-1.075

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	Stable
<b>Incompatibility</b>	Alkaline materials and will etch glass
<b>Hazardous Polymerization</b>	Will not occur
<b>Hazardous Decomposition Products</b>	None
<b>Conditions to Avoid</b>	None

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Dermal, Oral and Inhalation
<b>Symptoms</b>	Irritation to burns
<b>Skin Irritant</b>	Yes
<b>Eye Irritant</b>	Yes
<b>Sensitizers</b>	Not determined
<b>Mutagenicity</b>	No information found
<b>Carcinogenicity</b>	Sulfuric Acid: Group 3 (known carcinogen)
<b>Reproductive Toxicity</b>	No information found
<b>Target Organs</b>	See section 2

There is no toxicological data for this product as a whole. Based on relevant ingredients with known acute toxicity, the acute toxicity estimate using the additive formula (ATE) has been determined.

**Acute Toxicity**

Test	Results	Basis
<b>Dermal</b>	31,167mg/kg	ATE determined practically non-toxic
<b>Oral</b>	862mg/kg	ATE determined Category 4
<b>Inhalation</b>	6,440ppm	ATE determined Category 4

**Section 12. Ecological Information**

**Environmental Effects** No ecological information available

### Section 13. Disposal Considerations

**Waste Information** Dispose of in accordance with all Federal, State and Local pollution control regulations.

### Section 14. Transportation Information

Regulatory Information	UN number	Proper Shipping Name	Classes	Packaging Group	Label Code
DOT Classification	UN1786	Hydrofluoric Acid and Sulfuric Acid Mixture	8,6.1	PGI	

Note: DOT Classification applies to most packaging sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

### Section 15. Regulatory Information

**US Federal Regulations** The following substances are listed as a toxic chemical and are subject to report under the SARA act Section 313:

Hydrogen Fluoride 7664-39-3 <10%

Sulfuric Acid 7664-93-9 <5%

The following substances have CERCLA reportable quantity values (in pounds):

**Hydrogen Fluoride 7664-39-3 100**

**Sulfuric Acid 7664-93-9 1,000**

**State Regulations** None

### Section 16. Other Information

**Last Revision** 10/24/14

The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for injuries from the use of the product described herein.