

**Material Safety Data Sheet**

May be used to comply with  
 OSHA's Hazard Communication Standard.  
 29 CFR 1910.1200. Standard must be  
 consulted for specific requirements.

**U.S. Department of Labor**

Occupational Safety and Health Administration  
 (Non-Mandatory Form)  
 Form Approved  
 OMB No. 12180072

<b>IDENTITY (As Used on Label and List)</b> ALUMINUM BRIGHTENER	<b>Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.</b>
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**Section I - Manufacturer**

<b>Manufacturer's Name</b> AIKEN CHEMICAL COMPANY	<b>Emergency Telephone Number</b> 1-800-922-1117; (864) 765-7359	
<b>Address (Number, Street, City, State and Zip Code)</b> P. O. Box 1904	<b>Telephone Number for Information</b> (864) 968-1250; 1-800-828-1860	
Greenville, SC 29602	<b>Date Prepared:</b> January 19, 1998	<b>Revision #</b> 1
12 Shelter Drive, Greer, SC 29650	<b>Signature of Preparer (optional)</b>	

**Section II - Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	NIOSH REL	%
Phosphoric Acid, CAS# 7664-38-2	1 mg/M <sup>3</sup>	1 mg/M <sup>3</sup>	3 mg/M <sup>3</sup> (STEL)	<10%
Hydrofluoric Acid, CAS# 7664-39-3	3 ppm	3 ppm		<15%

The specific chemical identity is being withheld as a trade secret. The specific chemical identity will be made available to health professionals upon request.

Aluminum Brightener is identified as an eye and skin irritant under criteria of OSHA Hazard Communication Standard 29 CFR 1910.1200. Corrosive product

**Section III - Physical/Chemical Characteristics**

<b>Boiling Point</b>	>212° F	<b>Specific Gravity (H<sub>2</sub>O - 1)</b>	1.060
<b>Vapor Pressure (mm Hg.)</b>	Unknown	<b>Melting Point</b>	32° F
<b>Vapor Density (AIR=1)</b>	Unknown	<b>Evaporation Rate (Butyl Acetate=1)</b>	<1.0
<b>Solubility in Water</b> Complete Solubility	<b>pH</b> <2		
<b>Appearance and Odor</b> Clear translucent liquid with an acid odor.			

**Section IV - Fire and Explosion Hazard Data**

<b>Flash Point (Method Used)</b> >212° F (PMCC)	<b>Flammable Limits</b> Not Determined	<b>LEL</b> N.D.	<b>UEL</b> N.D.
<b>Extinguishing Media</b> Water fog, CO <sub>2</sub> , dry chemical, or alcohol foam.			
<b>Special Fire Fighting Procedures</b> Fire fighters wear self-contained breathing apparatus with full protective clothing.			
<b>Unusual Fire and Explosion Hazards</b> Extinguish all nearby sources of ignition since flammable hydrogen gas will be liberated from contact with some metals.			

**Section V - Reactivity Data**

Stability	Unstable		Conditions to Avoid
	Stable	X	Mixing with high pH solutions, alkalis or oxidizing agents.

**Incompatibility (Materials to Avoid)**

Avoid contact with reactive metals (Al, Sn, Zn), alkalis, reducing materials or oxidizing agents.

**Hazardous Decomposition or Byproducts**

Hydrogen Fluoride, phosphorous oxides, carbon monoxide and carbon dioxide.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	Excessive heat & contamination.

**Section VI - Health Hazard Data**

Routes of Entry:	Inhalation?	Eyes?	Skin?	Ingestion?
	Yes	Yes	Yes	Yes
<b>Health Hazards (Acute and Chronic)</b>				
Chronic overexposure – See page 3.		For acute overexposure, see SECTION IX.		
Hazard Type: Eye & skin irritant.		Corrosive product.		
Carcinogenicity:	NTP?	LARC Monographs?	OSHA Regulated?	
	No	No	No	
<b>Signs and Symptoms of Exposure:</b>				
SEE SECTION IX (Acute Overexposure)				
<b>Medical Conditions Generally Aggravated by Exposure:</b>				
Persons with pre-existing skin disorders, eye problems or impaired liver, kidney and respiratory functions.				
<b>Emergency and First Aid Procedures</b>				
SEE SECTION IX				

**Section VII - Precautions for Safe Handling and Use****Steps to Be Taken in Case Material is Released or Spilled**

Stop spill at source. Dike area of spill with soil (sand, clay) to prevent spreading. Neutralize the spill with soda ash (providing adequate ventilation for CO<sub>2</sub> release) or lime. Shovel the neutralized spillage into salvage container.

**Waste Disposal Method**

Dispose of in accordance with all local, state, and federal regulations.

**Precautions to Be Taken in Handling and Storing**

Store in a dry cool area away from pH chemicals and glass. Always use eye & skin protection when handling this product.

**Other Precautions:**

Do not re-use empty container. Wash thoroughly after handling this product.

**Section VIII - Control Measures****Respiratory Protection (Specify Type)**

None, unless exposure limits are exceeded; then use NIOSH/MSHA air supplied device.

Ventilation	Local Exhaust	Special
	Acceptable	None
	Mechanical(General)	Other:
	To reduce exposure limits.	None
Protective Gloves	Eye Protection	
Rubber gloves	Splash goggles and/or safety glasses.	

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**Other Protective Clothing or Equipment**

To prevent skin contact, wear impervious (rubber) clothing and boots.

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**Work/Hygienic Practices** Always use caution when working with chemicals.

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**Section IX - Routes and Effects of Overexposure:**

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**SKIN:**

Prolonged or repeated contact to unprotected skin may cause irritation, chemical burns and possible destruction of surrounding tissues. Product is corrosive to the skin.

**EYES:**

Can cause tearing, redness and severe irritation, which may result in impairment or loss of vision. Product is extremely corrosive to the eyes.

**INGESTION:**

Product is corrosive to the mouth and throat. Can cause abdominal pain, nausea, vomiting, and severe discomfort.

**INHALATION:**

Excessive inhalation of vapors can cause irritation, coughing and chest pain. Excessive inhalation of vapors may cause chemical pneumonitis.

**Emergency and First Aid Procedures:**

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**SKIN:**

Immediately flush skin with large amounts of running water for 30 minutes. Remove contaminated clothing; wash clothing before re-use. Seek medical attention.

**EYES:**

Immediately flush eyes with large amounts of water for at least 30 minutes, lifting upper and lower lids occasionally. Seek medical attention.

**INGESTION:**

**DO NOT** induce vomiting. Dilute by giving large amounts of water or milk. Do not give anything by mouth to an unconscious or convulsing person. Seek medical attention immediately.

**INHALATION:**

If affected by vapor, remove individual to fresh air. If breathing has stopped, give artificial respiration. If discomfort persists, seek medical attention.

IDENTITY: Aluminum Brightener

Diluted solutions may not be painful or show visible effects until hours after skin exposure, during which time the acids have penetrated the skin causing possible destruction of tissue and development of skin ulcers. The bodily burs that are a result of these acids are very slow to heal. Excessive contact with this product may also cause fluoride poisoning, hypocalcemia and susceptibility to respiratory illness.

**SHIPPING INFORMATION**

DOT PROPER SHIPPING NAME: CORROSIVE LIQUID N.O.S., 8, UN 1760

PG II, RQ (HYDROFLUORIC & PHOSPHORIC ACID)