

1. Product and Company Identification

Product Code:	2231	
Product Name:	SL-223 Aluminum Brightener	
Company Name:	Sunbelt Laboratories	Phone Number:
	P.O. BOX 1563	(281)261-4747
	Stafford, TX 77497	
Web site address:	www.sunbelt-labs.com	
Emergency Contact:	CHEM-TEL	(800)255-3924

2. Hazards Identification

Skin Corrosion/Irritation, Category 1B**Serious Eye Damage/Eye Irritation, Category 2A****GHS Signal Word:** **Danger****GHS Hazard Phrases:** Causes severe skin burns and eye damage.
Causes serious eye irritation.**GHS Precautionary Phrases:** Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.**GHS Response Phrases:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
Specific treatment see ... on this label.
If eye irritation persists, get medical advice/attention.
Wash contaminated clothing before reuse.**GHS Storage and Disposal Phrases:** Store locked up.
Dispose of contents/container to ...**OSHA Regulatory Status:** This material is classified as hazardous under OSHA regulations.**Potential Health Effects (Acute and Chronic):** Chronic inhalation and ingestion may cause chronic fluoride poisoning (fluorosis) characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. May cause digestive tract disturbances.

Chronic: Effects may be delayed.

Inhalation: Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Aspiration may lead to pulmonary edema. Depletes calcium levels in the body which if left untreated can lead to hypocalcemia and death. May cause systemic effects. Harmful if inhaled. May cause respiratory tract irritation. May cause narcotic effects in high concentration. May cause lung damage. May cause anemia. May cause central nervous system effects such as nausea and headache.**Skin Contact:** Causes skin burns. Contact with liquid is corrosive and causes severe burns and



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ulceration. May penetrate the skin and cause severe tissue and bone destruction. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color. Causes skin irritation. Harmful if absorbed through the skin. Substance is rapidly absorbed through the skin. Causes symptoms similar to those of inhalation. Skin sensitization testing with human volunteers produced negative results. A skin notation is not recommended by ACGIH, based on estimates from physiologically based pharmacokinetic models which indicate that, even in worst-case dermal-exposure scenarios, 2-butoxyethanol is not absorbed in amounts sufficient to cause red blood cell hemolysis in humans.

Eye Contact:

Causes eye burns. May cause chemical conjunctivitis and corneal damage. Causes eye irritation. Causes redness and pain.

Ingestion:

Causes gastrointestinal tract burns. Harmful if swallowed. May cause severe and permanent damage to the digestive tract. May cause kidney damage. May cause perforation of the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. Inorganic fluorides can be harmful. Acute exposure to fluorine compounds can lead to digestive tract burns, and abdominal pain. Fluoride can reduce calcium levels leading to fatal hypocalcemia. May cause systemic effects. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Medical Conditions Generally No data available.

Aggravated By Exposure:

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	
7664-38-2	Phosphoric acid	10.0 %	
1341-49-7	Ammonium bifluoride	4.0 %	
111-76-2	Ethanol, 2-Butoxy-	1.0 %	

4. First Aid Measures

Emergency and First Aid**Procedures:****In Case of Inhalation:**

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

In Case of Skin Contact:

Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

In Case of Eye Contact:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

In Case of Ingestion:

Get medical aid immediately. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Call a poison control center.

Signs and Symptoms Of Exposure:

burning sensation, Dermatitis. Effects may be delayed. Gastrointestinal disturbances. Vomiting.

Note to Physician:

Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt: NE Method Used: Estimate

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NE

Suitable Extinguishing Media: Use foam, dry chemical, or carbon dioxide. For small fires, use dry chemical, carbon dioxide, or water spray. Use water spray, dry chemical, carbon dioxide, or chemical foam.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated. Will burn if involved in a fire. Combustible liquid and vapor.

Flammable Properties and Hazards: No data available.
No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Do not let this chemical enter the environment. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool.

7. Handling and Storage

Precautions To Be Taken in Handling: Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Wash thoroughly after handling. Minimize dust generation and accumulation. Keep container tightly closed. Discard contaminated shoes. Use only with adequate ventilation. Use spark-proof tools and explosion proof equipment. Keep away from heat, sparks and flame.

Precautions To Be Taken in Storing: Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area. Keep away from acids. Keep away from strong bases.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7664-38-2	Phosphoric acid	PEL: 1 mg/m3	TLV: 1 mg/m3 STEL: 3 mg/m3	No data.
1341-49-7	Ammonium bifluoride	No data.	No data.	No data.
111-76-2	Ethanol, 2-Butoxy-	PEL: 50 ppm	TLV: 20 ppm	No data.



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Respiratory Equipment (Specify Type):	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.
Eye Protection:	Wear chemical splash goggles. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure.
Other Protective Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Engineering Controls (Ventilation etc.):	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. Use explosion-proof ventilation equipment. Use only under a chemical fume hood.

9. Physical and Chemical Properties

Physical States:	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Solid
Appearance and Odor:	Blue. Acid-like.
pH:	2.4
Melting Point:	NE - 0.00 F (-17.8 C)
Boiling Point:	> 212.00 C (413.6 F) - 239.50 F (115.3 C)
Flash Pt:	NE Method Used: Estimate
Evaporation Rate:	< 1
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	nd
Vapor Density (vs. Air = 1):	< 1
Specific Gravity (Water = 1):	~ 1.28 at 77.0 F (25.0 C)
Solubility in Water:	soluble
Octanol/Water Partition Coefficient:	No data.
Percent Volatile:	0.56 % by volume.
Autoignition Pt:	NE
Decomposition Temperature:	No data.
Viscosity:	No data.

10. Stability and Reactivity

Stability:	Unstable <input type="checkbox"/> Stable <input checked="" type="checkbox"/>
Conditions To Avoid - Instability:	Incompatible materials, Metals. Excess heat, dust generation, Moisture, ignition sources.
Incompatibility - Materials To Avoid:	Strong oxidizing agents, Reacts with most common metals to produce hydrogen gas. Is corrosive to many materials including leather, rubber, and many organics. acids, Bases, Strong bases, Aluminum.
Hazardous Decomposition or Byproducts:	Phosphine, oxides of phosphorus, hydrogen gas. hydrogen fluoride gas. ammonia and/or derivatives, Carbon monoxide.
Possibility of Hazardous Reactions:	Will occur <input type="checkbox"/> Will not occur <input checked="" type="checkbox"/>
Conditions To Avoid -	Product will not undergo polymerization.

Hazardous Reactions:

11. Toxicological Information

Toxicological Information: Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: No information found.

Carcinogenicity/Other Information: CAS# 7664-38-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 1341-49-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 111-76-2: ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans.
California: Not listed.
NTP: Not listed.
IARC: Not listed.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7664-38-2	Phosphoric acid	n.a.	n.a.	n.a.	n.a.
1341-49-7	Ammonium bifluoride	n.a.	n.a.	n.a.	n.a.
111-76-2	Ethanol, 2-Butoxy-	n.a.	3	A3	n.a.

12. Ecological Information

General Ecological Information: Environmental: No information available.
Physical: No information available.
Other: Do not empty into drains. TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67,, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.
Physical: No information found.
Other: An estimated BCF value of 2.5,, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low, according to a recommended classification scheme.

13. Disposal Considerations

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Contains Hydrofluoric Acid. Compounds, cleaning liquid. (Phosphoric acid, Ammonium bifluoride)

DOT Hazard Class: 8 CORROSIVE

UN/NA Number: NA1760 **Packing Group:** II





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LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Contains Hydrofluoric Acid.

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7664-38-2	Phosphoric acid	No	Yes NA	No
1341-49-7	Ammonium bifluoride	No	Yes NA	No
111-76-2	Ethanol, 2-Butoxy-	No	No	Yes-Cat. N230

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explosive
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flammable (gases, aerosols, liquid, or solid)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxidizer (liquid, solid or gas)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-reactive
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric (liquid or solid)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric gas
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-heating
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Organic peroxide
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corrosive to metal
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gas under pressure (compressed gas)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	In contact with water emits flammable gas
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Combustible Dust
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Physical) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Acute toxicity (any route of exposure)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Skin Corrosion or Irritation
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Germ cell mutagenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Health) Hazard Not Otherwise Classified (HNOC)

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7664-38-2	Phosphoric acid	CAA HAP,ODC: No CWA NPDES: No TSCA: Yes - Inventory CA PROP.65: No
1341-49-7	Ammonium bifluoride	CAA HAP,ODC: No CWA NPDES: No TSCA: Yes - Inventory CA PROP.65: No
111-76-2	Ethanol, 2-Butoxy-	CAA HAP,ODC: No CWA NPDES: No TSCA: Yes - Inventory CA PROP.65: No

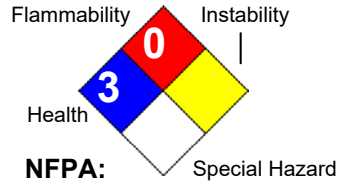
16. Other Information

Revision Date: 05/26/2021

Hazard Rating System:

HEALTH		3
FLAMMABILITY		0
REACTIVITY		1
PPE		

HMIS:



Additional Information About This Product: No data available.

Company Policy or Disclaimer:

Disclaimer: DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. There is no assumption of liability for accuracy contained within this information. 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.