

## Section 1: Identification

**Product identifier:**

Identification as on the label/Trade name: ALUBRITE 801

Other means of identification: AL801

**Relevant identification uses of the substance and uses advised against:****Recommended use:** Aluminum brightener and cleaner.**Restrictions on use:** For industrial use only.**Manufacturer/Supplier identifier:**

BBSpro Services Inc  
204-11 Burbidge St,  
Coquitlam,  
B.C. V3K 7B2  
Canada +1-604-420-4305

**Emergency telephone numbers:**

Emergency Contact:

BBSpro Services Inc: +1-877-420-4305 (24 hours)

CANUTEC: +1-613-996-6666 (24 hours)

## Section 2: Hazard Identification

**Classification of the mixture:**

The mixture is classified according to: Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

**Hazard classes/Hazard categories:**

Skin Corrosive (Category 1A)

Acute Toxicity, Oral (Category 2)

Acute Toxicity, Dermal (Category 1)

Acute Toxicity, Inhalation (Category 2)

**Label elements:****Hazard pictograms:**

**Signal word:** Danger.

**Hazard statements:**

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.

**Precautionary statements:**

P203 Obtain, read and follow all safety instructions before use.

P260 Do not breathe fumes/vapors/spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash hands and skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P301 + P316 IF SWALLOWED: Get emergency medical help immediately.

P302 + P352 IF ON SKIN: Wash with plenty of water/calcium gluconate.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P354 + P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P316 Get emergency medical help immediately.

P330 Rinse mouth.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards which do not result in classification:** None.

### Section 3: Composition/Information on Ingredients

**Substance/Mixture:** Mixture.

**Ingredients:**

| Substance name (IUPAC/EC)  | CAS-No.   | Concentration<br>% by weight | SCLs, M-Factors,<br>Acute Toxicity<br>Estimates (ATE)  | Classification<br>EC1272/2008   |
|--|-----------|------------------------------|--|---|
|  | EC-No.    |                              |  |   |
| hydrofluoric acid  | 7664-39-3 | 10-30%                       | Eye Irrit. 2; H319:<br>0,1 % ≤ C < 1%<br>Skin Corr. 1A;<br>H314: C ≥ 7%<br>Skin Corr. 1B;<br>H314: 1% ≤ C < 7% | Acute Tox. 2 H300<br>Acute Tox. 1 H310<br>Skin Corr. 1A H314<br>Acute Tox. 2 H330 |
|  | 231-634-8 |                              |  |   |
| 2-butoxyethanol;<br>ethylene glycol monobutyl ether;<br>butyl cellosolve | 111-76-2  | 1-10%                        | oral:<br>ATE = 1200 mg/kg<br>bw (-)  | Acute Tox. 4 H302<br>Skin Irrit. 2 H315<br>Eye Irrit. 2 H319<br>Acute Tox. 4 H332 |
|  | 203-905-0 |                              |  |   |



There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### Section 4: First-Aid Measures

##### Description of first aid measures:

**General recommendations:** Seek medical advice immediately in all cases. Personal protective equipment (respirator, gloves, etc.) required for rescuers of victims. In case of product splashing into eyes and face, treat eyes first. Decontaminate the victim first (HANDLE PATIENT AND ALL CONTAMINATED CLOTHING WITH HYDROFLUORIC ACID RESISTANT GLOVES).

**In case of inhalation:** Remove the subject from the contaminated area as soon as possible. Transport subject lying down, with the head higher than the body, to a quiet, uncontaminated and well-ventilated location. Administer oxygen (2.5% calcium gluconate if available, can be oxygen nebulized with trained personnel) or cardiopulmonary resuscitation if necessary and as soon as possible. If patient is unconscious, give artificial respiration. Note: Mouth to mouth resuscitation is not recommended. Keep warm (blanket). Seek medical advice in all cases. Take to a hospital.

**In case of skin contact:** Immediately bring the clothed subject under the shower. Remove contaminated shoes, socks and clothing; while washing the affected skin with running water for 5 minutes. Double bag all contaminated clothing for disposal. Immediately apply calcium gluconate gel 2.5% and massage into the affected area using rubber gloves; continue to massage while repeatedly applying gel until 15 minutes after pain is relieved. Apply water longer (15 minutes) if calcium gluconate is not available. If finger/finger nails are touched, even if there is no pain, dip them in a bath of 5% calcium gluconate for 15 to 20 minutes. Keep warm (blanket), provide clean clothing. Consult a physician immediately in all cases of skin contact no matter how minor. Take to a hospital immediately.

**In case of eye contact:** Flush eyes with running water for 5 minutes, while keeping the eyelids wide open. Rinse the eyes with a calcium gluconate 1% solution in physiological serum (10ml of calcium gluconate 10% in 90 ml of physiological serum) for 10 minutes. Continue a calcium gluconate drip into eyes... Then drop while transporting. If 1% calcium gluconate is not available continue flushing with water. In the case difficulty opening the eyelids, administer an analgesic eye wash. Do not use oily drops, ointment, or hydrofluoric acid skin burn treatments. Consult an ophthalmologist or eye specialist immediately in all cases. Take to a hospital immediately.

**In case of ingestion:** Consult a physician immediately in all cases. Take to a hospital.

##### Most important symptoms and effects, both acute and delayed:

**Inhalation:** Hydrofluoric acid vapors may cause laryngospasm, laryngeal edema, bronchospasm, and/or acute or delayed pulmonary edema. Acute symptoms may include coughing, choking, chest tightness, chills, fever, and cyanosis.

**Skin contact:** The usual initial signs of a hydrofluoric acid burn are redness, edema, and blistering. With more concentrated acids, a blanched white area appears. The fluoride ion penetrates the upper layers of the skin. A thick granular exudate may form under blisters due to liquefaction necrosis. In rare (and untreated) cases, there may be penetration to underlying bone with decalcification. Hydrofluoric acid burns require immediate and specialized first aid and medical treatment.



**Eye contact:** Hydrofluoric acid can cause severe eye burns with destruction or opacification of the cornea. Blindness may result from severe or untreated exposures. Immediate first aid and specialized medical care is required.

**Ingestion:** Ingestion of hydrofluoric acid may result in severe burns to the mouth, esophagus, and stomach. Severe systemic effects are common.

**Indication of any immediate medical attention and special treatment needed:**

The effect of hydrofluoric acid, i.e., the onset of pain, particularly in dilute solutions, may not be felt for up to 24 hours. It is important that workers have immediate access to the antidote (calcium gluconate) both on and off the worksite in order to apply it as soon as possible. Instructions should be given for the worker not to use the gel in the eye and the worker to still seek medical attention regardless of how minor the contact. The calcium combines with the fluoride to form the insoluble calcium fluoride thus preventing the fluoride from entering the intact skin and causing tissue damage.

## Section 5: Fire-Fighting Measures

**Extinguisher media:**

**Suitable extinguisher media:** Use fire extinguishing methods suitable to surrounding conditions.

**Unsuitable extinguishing media:** None known.

**Special hazards arising from the hazardous product:** Noncombustible/nonflammable but may produce dangerous fumes if involved in fire. Formation of dangerous gas in contact with water or humid air. Formation of flammable gas on contact with certain metals. Contact with water may produce heat release and present risks of splashing.

**Special protective equipment and precautions for fire-fighters:** In all cases wear self-contained breathing apparatus. Wear full protective acid resistant suit; use water spray when approaching the fire. Cool containers exposed to fire. Depending on wind direction, warn people of danger of inhalation, close doors and windows and get ventilation stopped. Approach from upwind. Absorb gas/vapors with water spray. After the fire, proceed rapidly to clean the surfaces exposed to the fumes in order to limit the damage to the equipment. As for any fire, ventilate and clean the rooms before re-entry.

## Section 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**

To reduce the risk of injury, users must read the instruction manual. See Section 8 for information on personal protection equipment.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**Methods and materials for containment and cleaning up:**

Take up with liquid-absorbent and neutralizing material (e.g., dry lime or soda ash), pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. All materials that have been contaminated with hydrofluoric acid still exhibit a hazard and therefore should also be disposed of as hazardous waste. These materials include empty bottles formerly containing hydrofluoric acid, spill debris, cleaning implements, and personal protective equipment.

## Section 7: Handling and Storage

### Precautions for safe handling:

Use in a well-ventilated area. Use only equipment and materials which are compatible with hydrogen fluoride. Keep away from reactive products. Use chemical resistant gloves (butyl rubber), goggles/face shield and acid resistant clothing and boots.

### Conditions for safe storage, including incompatible materials:

Keep in a hermetically sealed container in a dry and well-ventilated place. Keep away from heat sources. Keep away from reactive products. Use containment dike around storage containers and transfer installation.

## Section 8: Exposure Controls / Personal Protection

### Control parameters:

#### **Occupational exposure limits:**

##### **Hydrofluoric acid, CAS 7664-39-3**

NIOSH REL TWA 3 ppm (2.5 mg/m<sup>3</sup>)

OSHA PEL TWA 3 ppm

##### **2-Butoxyethanol, CAS 111-76-2**

NIOSH REL TWA 5 ppm (24 mg/m<sup>3</sup>)

OSHA PEL TWA 50 ppm (240 mg/m<sup>3</sup>)

### Exposure controls:

**Appropriate engineering controls:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Product should be used in close proximity to a safety shower and eye wash station.

### Individual protection measures, such as personal protective equipment:

**Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves and long-sleeved clothing. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Full contact**

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

#### **Splash contact**

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min



**Body Protection:** Complete suit and rubber boots protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## Section 9: Physical and Chemical Properties

### Information on basic physical and chemical properties:

**Appearance (form):** Liquid.

**Color:** Green.

**Odor:** Pungent.

**Odor threshold:** No data available.

**pH:** 1.1

**Melting point/Freezing point:** No data available.

**Initial boiling point/boiling range:** ~100 °C

**Flash point (°C):** No data available.

**Evaporation rate:** No data available.

**Flammability (solid, gas):** No data available.

**Lower flammable/explosive limit:** No data available.

**Upper flammable/explosive limit:**

**Vapor pressure:** No data available.

**Vapor density:** No data available.

**Relative density:** 1.1

**Solubility:** Soluble in all proportions in water. No data available (for other liquids).

**n-Octanol/Water partition coefficient:** No data available.

**Auto-ignition temperature:** No data available.

**Decomposition temperature:** No data available.

**Viscosity:** No data available.

## Section 10: Stability and Reactivity

**Reactivity:** No specific data is available for this product.

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** Exothermic reaction when dissolved in water. Corrosive action on some metals when moisture exists.

**Conditions to avoid:** No data available.

**Incompatible materials:** Explosive mixtures in contact with alkaline metals (Na, K, Li, etc.). In presence of humidity, contact with metals releases hydrogen.



**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition should not occur. In the event of fire: refer to Section 5.

## Section 11: Toxicological Information

### Information on toxicological effects:

**Acute toxicity:** Fatal if swallowed, in contact with skin or if inhaled.

Hydrofluoric acid, CAS 7664-39-3

Oral: No data available

LC50 Inhalation - Rat - 1 h - 1,34 mg/l - vapor

Acute toxicity estimate, Inhalation - 0,6 mg/l - vapor

Symptoms: burns of mucous membranes, Cough, Shortness of breath, Possible damages: damage of respiratory tract, Resultant lesions may affect the following: bronchitis, Pneumonia, Lung edema

Acute toxicity estimate, Dermal - 5,1 mg/kg

**Skin corrosion/irritation:** Causes severe skin burns and eye damage.

**Serious eye damage/irritation:** Causes serious eye damage.

**Respiratory or skin sensitization:** No data available.

**Germ cell mutagenicity:** No data available.

**Carcinogenicity:** No data available.

**Reproductive toxicity:** No data available.

**STOT-single exposure:** No data available.

**STOT-repeated exposure:** No data available.

**Aspiration hazard:** No data available.

## Section 12: Ecological Information

**Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** No data available.

## Section 13: Disposal Considerations

**Method of disposal:** Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging:** Dispose of as unused product.

## Section 14: Transport Information

**UN number:** 1790

**UN proper shipping name:** HYDROFLUORIC ACID

**Hazard class:** 8

**Subsidiary class:** 6.1

**Packing group:** II

**Environmental hazards:** No.

**Transport in bulk according to Annex II of Marpol and the IBC Code:** Not applicable.

**Special precautions for user:** Refer to Sections 6 – 8.

## Section 15: Regulatory Information

### Safety, health and environmental regulations/legislation for the mixture:

**WHMIS Classification:** This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**Canadian DSL/NDSL Inventory Status:**

DSL: Yes

NDSL: No

**Other Canadian Regulations:** Not applicable.

**Chemical Safety Assessment carried out:** No.

## Section 16: Other Information

**Date of the latest revision of the SDS:** 18-Jan-2022

**Indication of changes:** GHS aligned.

**Relevant classification and H statements (number and full text):**

H300 Fatal if swallowed.

H302 Harmful if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H332 Harmful if inhaled.

**NFPA rating:**



Health: 4 - Materials that, under emergency conditions, can be lethal.

Fire: 0 - Materials that will not burn. This includes any material that will not burn in air when exposed to a temperature of 1500 degrees F (815.5 degrees C) for a period of 5 min.





**Safety Data Sheet for**

**ALUBRITE 801**

According to WHMIS 2015

First Issue Date: 12-June-2018

Revision Date: 18-Jan-2022

Revision: 1

Reactivity: 1 - Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressure.

**Further information:** This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to readers:** Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**References:**

ECHA (European Chemicals Agency): Summary of CLP and Guidance on Safe Use Dossiers.

Honeywell Industrial Fluorines: Recommended Medical Treatment for Hydrofluoric Acid Exposure.

Canadian Centre for Occupational Health and Safety: WHMIS 1988 - Material Safety Data Sheets (MSDSs)

Transport Canada: Emergency Response Guidebook 2020

GESTIS International Limit Values

Supplier SDSs

[ehs.princeton.edu](http://ehs.princeton.edu)

[www.epa.gov](http://www.epa.gov)