





SAFETY DATA SHEET

1. Product and Company Identification

PRODUCT NUMBER:	2251	COMPANY PHONE:	1-800-241-8180
PRODUCT NAME:	ALUMIN-X	EMERGENCY TELEPHONE:	1-800-241-8180
PRODUCT DESCRIPTION:	Heavy-Duty Aluminum Cleaner and Brightener	INFOTRAC:	1-800-535-5053
COMPANY INFORMATION:	PRO CHEM, INC. 1475 Bluegrass Lakes Parkway Alpharetta, GA 30004		

2. Hazards Identification

GHS CLASSIFICATION: Skin corrosion - Category 1 Eye Damage - Category 1 Acute Toxicity - Oral - Category 3 Acute Toxicity - Inhalation - Category 4 Corrosive to Metals	SIGNAL WORD: DANGER	SYMBOL:		
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HAZARD STATEMENT (S):

Keep out of reach of children.
Read label and SDS before use.
Toxic if swallowed.
Harmful if inhaled.
Causes severe skin burns and eye damage.
May be corrosive to metals.

PRECAUTIONARY STATEMENT:

Prevention:

Do not breathe mists.
Use only outdoors or in a well-ventilated area.
Wash hands, face, and all other exposed areas of body thoroughly after handling.
Wear protective gloves and clothing.
Wear eye and face protection.
Do not eat, drink, or smoke when using this product.
Keep only in original container.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or a physician
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water/shower. Wash contaminated clothing before reuse.
Overexposure may produce hypocalcemia; therefore systemic administration of calcium gluconate may be necessary.
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 a physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or a physician.
Absorb spillage to prevent material damage.

Storage:

Store locked up.
Store in corrosive resistant plastic container.

Disposal: Dispose of contents and container in accordance with all local, regional, and national regulations.

HAZARDS NOT OTHERWISE SPECIFIED:

Both the liquid and vapor can cause severe burns which may not be immediately painful or visible.
May cause systemic toxic effects such as fluorosis, hypocalcemia, and cardiac arrhythmia.

3. Composition / Information on Ingredients

CHEMICAL NAME	CAS	Concentration % by Weight
Hydrofluoric Acid	7664-39-3	>=5 <= 10
2-butoxyethanol	111-76-2	>=1 <= 5

4. First Aid Measures

EMERGENCY OVERVIEW

WARNING: Harmful if swallowed or inhaled. Causes severe skin burns and eye damage. Do not get on skin. Avoid breathing vapor or mists.
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 a physician.
SKIN: Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of soap and water/shower. If skin irritation persists, get medical attention. Overexposure may produce hypocalcemia; therefore systemic administration of calcium gluconate may be necessary.
INHALATION:
Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or a doctor.
INGESTION:
Rinse mouth. Do not induce vomiting. Seek medical attention immediately.

5. Fire-Fighting Measures

SUITABLE FIRE EXTINGUISHING MEDIA:

Use water spray, fog, or foam.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

Containers may build pressure and rupture.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:

Carbon Dioxide. Carbon Monoxide.

SPECIFIC FIREFIGHTING METHODS:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode.

6. Accidental Release Measures

PERSONAL PRECAUTIONS:

Put on appropriate personal protective equipment (see Section 8).

ENVIRONMENTAL PRECAUTIONS AND CLEAN-UP METHODS:

Stop all leaks. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Disperse vapors with water spray. Prevent runoff from entering drains, sewers, streams or other bodies of water. Absorb spill with inert material. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

7. Handling and Storage

Do not use or store near heat, sparks or open flame. Store in a cool, dry place. Do not get in eyes, on skin or on clothing. Avoid breathing sprays and vapors. Keep out of reach of children.

8. Exposure Controls / Personal Protection

CHEMICAL NAME	ACGIH TLV	OSHA PEL
2-butoxyethanol	20 ppm	25 ppm (skin)
Hydrofluoric Acid	3 ppm	3 ppm

PERSONAL PROTECTIVE EQUIPMENT:



EYE PROTECTION: Wear safety glasses or goggles.

SKIN PROTECTION: Wear impervious gloves (made from rubber, nitrile, or neoprene), clothing, and boots.

RESPIRATORY PROTECTION: When respiratory protection is required use an organic vapor cartridge and particulate cartridge. All respiratory programs must that meet OSHA's 29 CFR 1910.34 & ANSI Z88.2 requirements.

ENGINEERING CONTROLS:

Good general ventilation required.

9. Physical & Chemical Properties

APPEARANCE	Clear liquid.	AUTO IGNITION TEMP	Not available.
BOILING POINT	Not available.	COLOR	Colorless.
DECOMPOSITION TEMPERATURE	Not available.	EVAPORATION RATE	Not available.
EXPLOSIVE LIMIT RANGES	Not available.	EXPLOSIVE PROPERTIES	Not available.
FLASH POINT	None.	MELTING/FREEZING POINT	Not available.
ODOR	Acidic.	ODOR THRESHOLD	Not available.
VOC CONTENT (Wt. %):	2.5	OXIDIZING PROPERTIES	Not available.
PARTITION COEFF	Not available.	PHYSICAL STATE	Liquid.
RELATIVE DENSITY	1.0	SOLUBILITY (WATER)	Complete.
VAPOR DENSITY	Not available.	VAPOR PRESSURE	Not available.
VISCOSITY	Not available.	pH	<1

10. Stability & Reactivity Information

REACTIVITY:

Under normal conditions of storage and use, hazardous reactions will not occur.

CHEMICAL STABILITY:

Stable under normal conditions.

INCOMPATIBLE MATERIALS:

Strong alkalines, oxidizers, organic matter, certain metals (aluminum).

CONDITIONS TO AVOID:

High temperatures.

DECOMPOSITION PRODUCTS:

CO, CO₂, H₂, SO₂.

11. Toxicological Information

PRIMARY ROUTE OF ENTRY:

Skin contact, skin absorption, eye contact, inhalation.

ACUTE/POTENTIAL HEALTH EFFECTS:

EYES: Causes severe irritation experienced as discomfort or pain, excess blinking and tear production, with redness and swelling of the

conjunctiva. Can injure the cornea and cause blindness.

SKIN: Both the liquid and vapor can cause severe burns, which may not be immediately painful or visible.

INHALATION: Breathing of this material is harmful. Mist or vapor inhalation can cause severe irritation to the nose, throat, and upper respiratory tract.

INGESTION: Harmful or fatal if swallowed. Corrosive. Symptoms may include severe burning and pain in mouth, throat, and abdomen. Vomiting, diarrhea and perforation of the esophagus and stomach lining may occur.

CHRONIC/LONG TERM EFFECTS:

Repeated exposure may produce erosion and discoloration of teeth. May cause systemic toxic effects such as fluorosis, hypocalcemia, and cardiac arrhythmia. 2-Butoxyethanol has caused red blood cell hemolysis in lab animals and secondary injury to the liver and kidney.

TARGET ORGAN EFFECTS:

Lungs and upper respiratory tract, gastrointestinal tract, eyes, skin.

REPRODUCTIVE/DEVELOPMENTAL INFORMATION:

No data.

CARCINOGENIC INFORMATION:

This material is not listed as a carcinogen by IARC, NTP, or OSHA.

ACUTE TOXICITY VALUES:

Hydrofluoric acid: LD50 (dermal, rat) =401-802 mg/kg.

12. Ecological Information

2-Butoxyethanol: Toxicity to fish-fathead minnow; HP; LD50 Results: 1700 mg/l.

13. Disposal Consideration

Waste must be disposed of in accordance with federal, state, and local environmental control regulations. See label for further instructions.

14. Transportation Information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

UN number: 3264

Proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS HYDROFLUORIC ACID)

Class: 8

Packing Group: II

15. Regulatory Information

CERCLA RQ (40 CFR 302)

Hydrofluoric Acid	100 lbs.
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Sections 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (40 CFR 355):

Hydrofluoric Acid

Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (40 CFR 372.65):

2-butoxyethanol

Hydrofluoric Acid

If identified components of this product are **CERCLA** hazardous substances and/or listed under **Sections 302, 304, or 313 of Title III** of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (also known as EPCRA, the Emergency Planning and Community Right-To-Know Act), or under **California Proposition 65** (Safe Drinking Water and Toxic Enforcement Act), they are listed above in Section 15 of this SDS.

If identified components of this product are listed under Section 313, this product contains toxic chemicals subject to the reporting requirements of Section 313. This information must be included in all SDS that are copied and distributed for this material.

Title III Section 311/312:

Hazardous Categories - 40 CFR 370.2:

ACUTE (X) Chronic (X) Fire () Pressure () Reactive () Not Applicable ()

T.S.C.A. Status:

All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

RCRA Status:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. If this product becomes hazardous waste it would be assigned RCRA Code(s): D002

16. Other Information

N/A = Not Applicable; N/D = Not Determined

HMIS Health Hazards: 3 Flammability: 0 Physical hazards: 1 Personal protection: D

DISCLAIMER:

To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard, which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product, which may not be covered by this SDS. The user is responsible for full compliance.