

Material Safety Data Sheet

Material Name: Aluma-Brite Aluminum Cleaner

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information

Envirotech Coating Systems, Inc.
3210 Hogarth Street
Eau Claire, WI 54703

Phone: 715-832-1717
Fax: 715-831-1919

*** Section 2 - Hazards Identification ***

Emergency Overview

May be harmful by inhalation and ingestion.

Potential Health Effects: Eyes

This product may cause irritation to the eyes.

Potential Health Effects: Skin

This product may cause irritation to the skin.

Potential Health Effects: Ingestion

This product may be harmful if it is swallowed.

Potential Health Effects: Inhalation

This product may be harmful by inhalation.

HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component
7732-18-5	Water
7664-38-2	Phosphoric acid
111-76-2	2-Butoxyethanol
112-34-5	Diethylene glycol monobutyl ether
Not Available	Trade Secret
7664-39-3	Hydrogen fluoride

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

First Aid: Skin

For skin contact flush with large amounts of water while removing contaminated clothing. If irritation persists, get medical attention.

First Aid: Ingestion

Give several glasses of water to dilute contents of stomach and call a physician.

First Aid: Inhalation

Move person to non-contaminated air. If the affected person is not breathing, apply artificial respiration. Seek medical attention.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

Not combustible

Hazardous Combustion Products

Hydrogen by reaction with metals, oxides of phosphorus, and gaseous hydrogen fluoride

Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

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NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

Clean-Up Procedures

Dispose of in accordance with local, state and federal requirements.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

*** Section 7 - Handling and Storage ***

Handling Procedures

Unscrew closure slowly. Allow all pressure to escape through threads before removing closure.

Storage Procedures

Keep containers tightly closed to avoid contamination. Store indoors in a cool, well-ventilated place.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

Phosphoric acid (7664-38-2)

ACGIH: 1 mg/m3 TWA
3 mg/m3 STEL

OSHA: 1 mg/m3 TWA
3 mg/m3 STEL

NIOSH: 1 mg/m3 TWA
3 mg/m3 STEL

2-Butoxyethanol (111-76-2)

ACGIH: 20 ppm TWA
OSHA: 25 ppm TWA; 120 mg/m3 TWA
Prevent or reduce skin absorption
NIOSH: 5 ppm TWA; 24 mg/m3 TWA
Potential for dermal absorption

Hydrogen fluoride (7664-39-3)

ACGIH: 0.5 ppm TWA (as F)
2 ppm Ceiling (as F)
OSHA: 3 ppm TWA (as F)
6 ppm STEL (as F)
NIOSH: 3 ppm TWA; 2.5 mg/m3 TWA
6 ppm Ceiling (15 min); 5 mg/m3 Ceiling (15 min)

Engineering Controls

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear chemical goggles or a full face shield.

Personal Protective Equipment: Skin

Use impervious gloves. Use of an impervious apron is recommended.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended.

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*** Section 9 - Physical & Chemical Properties ***

Appearance:	Clear	Odor:	Characteristic
Physical State:	Liquid	pH:	ND
Vapor Pressure:	ND	Vapor Density:	ND
Boiling Point:	ND	Melting Point:	ND
Solubility (H2O):	ND	Specific Gravity:	ND
Evaporation Rate:	ND	VOC:	ND
Octanol/H2O Coeff.:	ND	Flash Point:	ND
Flash Point Method:	ND	Upper Flammability Limit (UFL):	ND
Lower Flammability Limit (LFL):	ND	Burning Rate:	ND
Auto Ignition:	ND		

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Freezing temperatures.

Incompatibility

Avoid contact with chlorine-releasing materials and with glass, ceramic, or concrete. Incompatible with bases and strong oxidizers.

Hazardous Decomposition

Hydrogen by reaction with metals, oxides of phosphorus, and gaseous hydrogen fluoride

Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

Component Analysis - LD50/LC50

Water (7732-18-5)

Oral LD50 Rat: >90 mL/kg

Phosphoric acid (7664-38-2)

Inhalation LC50 Rat: >850 mg/m³/1H; Oral LD50 Rat: 1530 mg/kg; Dermal LD50 Rabbit: 2730 mg/kg

2-Butoxyethanol (111-76-2)

Inhalation LC50 Rat: 2.21 mg/L/4H; Inhalation LC50 Rat: 450 ppm/4H; Oral LD50 Rat: 470 mg/kg; Dermal LD50 Rat: 2270 mg/kg; Dermal LD50 Rabbit: 220 mg/kg

Diethylene glycol monobutyl ether (112-34-5)

Oral LD50 Rat: 3384 mg/kg; Dermal LD50 Rabbit: 2700 mg/kg

Hydrogen fluoride (7664-39-3)

Inhalation LC50 Rat: 850 mg/m³/1H; Inhalation LC50 Rat: 1276 ppm/1H

Carcinogenicity

Component Carcinogenicity

2-Butoxyethanol (111-76-2)

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans

IARC: Monograph 88 [2006] (Group 3 (not classifiable))

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*** Section 12 - Ecological Information ***

Ecotoxicity

Component Analysis - Ecotoxicity - Aquatic Toxicity

Phosphoric acid (7664-38-2)

Test & Species

96 Hr LC50 Gambusia affinis	3-3.5 mg/L
12 Hr EC50 Daphnia magna	4.6 mg/L

Conditions

2-Butoxyethanol (111-76-2)

Test & Species

96 Hr LC50 Lepomis macrochirus	1490 mg/L [static]
24 Hr EC50 water flea	1720 mg/L
24 Hr LC50 Daphnia magna	1698-1940 mg/L

Conditions

Diethylene glycol monobutyl ether (112-34-5)

Test & Species

96 Hr LC50 Lepomis macrochirus	1300 mg/L [static]
96 Hr EC50 Scenedesmus subspicatus	>100 mg/L
24 Hr EC50 water flea	2850 mg/L
48 Hr EC50 Daphnia magna	>100 mg/L

Conditions

Hydrogen fluoride (7664-39-3)

Test & Species

48 Hr LC50 Lepomis macrochirus	660 mg/L
48 Hr EC50 Daphnia magna	270 mg/L

Conditions

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

Hydrogen fluoride (7664-39-3)

RCRA: waste number U134 (Corrosive waste, Toxic waste)

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not Regulated

*** Section 15 - Regulatory Information ***

US Federal Regulations

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Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Phosphoric acid (7664-38-2)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

Hydrogen fluoride (7664-39-3)

SARA 302: 100 lb TPQ

CERCLA: 100 lb final RQ; 45.4 kg final RQ

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Phosphoric acid	7664-38-2	Yes	Yes	Yes	Yes	Yes	Yes
2-Butoxyethanol	111-76-2	Yes	Yes	Yes	Yes	Yes	Yes
Hydrogen fluoride	7664-39-3	Yes	Yes	Yes	Yes	Yes	Yes

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Phosphoric acid	7664-38-2	1 %
2-Butoxyethanol	111-76-2	1 %
Diethylene glycol monobutyl ether	112-34-5	1 %

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Water	7732-18-5	Yes	DSL	EINECS
Phosphoric acid	7664-38-2	Yes	DSL	EINECS
2-Butoxyethanol	111-76-2	Yes	DSL	EINECS
Diethylene glycol monobutyl ether	112-34-5	Yes	DSL	EINECS
Hydrogen fluoride	7664-39-3	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial and local laws.

Key/Legend

NA - Not Applicable

ND - Not Determined

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

TLV - Threshold Limit Value

PEL - Permissible Exposure Limit

TWA - Time Weighted Average

STEL - Short Term Exposure Limit

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer