

Safety Data Sheet

ALUMABRITE

Section 1. Product and Company Identification

Product name: **ALUMABRITE**

Other Means of Identification: Not Applicable

Product use: Aluminum Cleaner

Company Information: GP Chemicals Specialty Ltd. 65 Beckett Avenue, Holland Landing, ON L9N 1R8

Telephone: (905)731-3622

Website: www.gpchemicals.ca

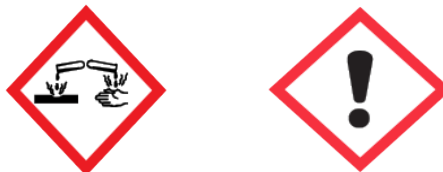
Emergency Telephone Number: 1-888-CAN-UTEC (226-8832)

Section 2. Hazards Identification

GHS Classification: Health hazards Acute toxicity, oral Category 4
Acute toxicity, dermal Category
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2
Sensitization, skin Category 1
Specific target organ toxicity, single exposure Category 3
Hazardous to the aquatic environment, acute Category 2 hazard

Environmental hazards: Hazardous to the aquatic environment, Category 3
Long-term hazard
OSHA defined hazards

GHS Label Elements



Hazard Pictograms:

Signal Word: **Danger, Corrosive**

ALUMABRITE

Hazard Statements: Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life. Harmful to aquatic life with long-lasting effects.

Precautionary Statement:

Avoid breathing mist, fume or vapour. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear eye/face protection. Wear protective gloves/protective clothing, Wash thoroughly after handling. Avoid release to the environment.

Response: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician. 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 CENTRE or doctor/physician. Wash contaminated clothing before reuse.

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

Other Hazards: There is no additional information.

| Section 3. Composition/Information on Ingredients | | | | |
|--|----------------|----------------------|-----------------------------|--------------------------|
| Chemical Name | CAS No: | Concentration | Common name/Synonyms | Other Identifiers |
| Phosphoric Acid | 7664-38-2 | 10 – 30 | Orthophosphoric acid | |
| Hydrofluoric Acid | 7664-39-3 | 5 – 10 | Hydronium fluoride | |

Section 4. First Aid Measures

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Skin Contact: Remove/take off immediately all contaminated clothing. Rinse immediately with plenty of water (for at least 15 minutes). Seek medical attention immediately if exposure is severe. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

ALUMABRITE

Ingestion: Rinse mouth with water. DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Inhalation: Using proper respiratory protection, immediately move the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Seek immediate medical advice. Symptoms may be delayed.

Most Important Symptoms/Effects, Acute and Delayed:

Overview

Symptoms/injuries: Corrosive. Causes burns. Harmful if swallowed.

Symptoms/injuries after inhalation: Causes severe respiratory irritation is inhaled. Symptoms may include: Burning of nose and throat, constriction of airway, difficulty breathing, and shortness of breath, bronchial spasms, chest pain and pink frothy sputum. Contact may cause immediate severe irritation progressing quickly into chemical burns. May cause pulmonary edema. Symptoms may be delayed.

Symptoms/injuries after skin contact: Contact may cause immediate severe irritation progressing quickly to chemical burns.

Symptoms/injuries after eye contact: Contact may cause immediate severe irritation progressing quickly to chemical burns. Can cause blindness.

Symptoms/injuries after ingestion: May cause burns or irritation of the linings of the mouth, throat and gastrointestinal tract. Swallowing a small quantity of this material will result in serious health hazard.

Chronic symptoms: Repeated or prolonged inhalation may damage lungs. Prolonged and repeated contact will eventually cause permanent tissue damage and effects such as erosion of teeth, lesions on the skin, trachea-bronchitis, mouth inflammation, conjunctivitis and gastritis.

See Toxicological Information (Section 11) for more detailed information on health effects and symptoms.

Section 5. Fire-Fighting Measures

Extinguishing Media: Product is not flammable. Use water spray, dry chemical, foam or carbon dioxide on fires involving this product. Use appropriate media for adjacent fire. Cool unopened containers with water.

Unsuitable Extinguishing Media: Do not get water inside containers. Do not apply water stream directly at source of leak. Do not use a heavy water stream. A direct water stream will cause violent splattering and generation of heat.

Specific Hazards During Fire-Fighting: Not flammable. Under conditions of fire this material may produce: Oxides of phosphorous; Phosgene.

Explosion Hazard: Product is not explosive

ALUMABRITE

See also Stability and Reactivity section.

Fire-Fighter Special Protective Equipment: Fire fighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products.

Fire Fighter Instructions: Keep upwind. Use water spray or fog for cooling exposed containers. If water is added to concentrated acid, violent splattering can occur, and considerable heat may be generated. Cool non-leaking, fire exposed containers with water spray.

Other information: Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

| | |
|-------------------------------------|---|
| For non-emergency personnel: | Protective equipment: use recommended respiratory protection. Wear suitable protective clothing, gloves and eye/face protection. |
| Emergency procedures: | Stop leak if safe to do so. Eliminate ignition sources. Evacuate unnecessary personnel. Ventilate area. Keep upwind |
| For Emergency responders: | Protective equipment: Use recommended respiratory protection. Wear suitable protective clothing, gloves and eye/face protection. |
| Emergency procedures: | Stop leak if safe to do so. Eliminate ignition sources. Evacuate unnecessary personnel. Ventilate area. Keep upwind. |

Methods and Materials for Containment and Cleaning Up

For containment: Contain any spills with dikes or inert absorbents to prevent migration and entry into sewers or streams. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

Methods for cleaning up: Ventilate area. Small quantities of liquid spill: take up in non-combustible inert absorbent material and shovel into container for disposal. Collect absorbed material and place into a sealed, labelled container to be disposed at an appropriate disposal facility according to current applicable laws and product characteristics at the time of disposal.

Liquid spill: neutralize with powdered limestone or sodium bicarbonate.

Practice good housekeeping – spillage can be slippery on smooth surface either wet or dry.

Environmental Precautions

Do not allow contact with soil, surface or ground water. Any release to the environment may be subject to federal/national or local reporting requirements

Section 7. Handling and Storage

Precautions for Safe Handling

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

Advice on Safe Handling: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe vapour or mist. Use only with adequate ventilation. Wash hands thoroughly after handling. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See Section 8 for additional information on hygiene measures.

Conditions for Safe Storage: Store locked up. Store away from incompatible materials. Protect container from physical damage. Keep container tightly closed when not in use. Store in a cool and well-ventilated area. See section 10 for incompatibilities.

Section 8. Exposure Controls/Personal Protection

| Components | CAS No: | Mg/m ³ | ppm | Non-standard units | Basis |
|-------------------|-----------|-------------------|---------|--------------------|------------------------------|
| Phosphoric Acid | 7664-38-2 | 1.00000 | | TWA | Canada, British Columbia OEL |
| Hydrofluoric Acid | 7664-39-3 | 1.60000 | 2.00000 | CEV | Canada, Ontario OELs |

TLV: Threshold Limit Value over 8 hours of work

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes

IDLH: Immediately Dangerous to Life of Health

Engineering Controls: Provide sufficient ventilation to keep vapours below the permissible exposure limit. Ensure adequate ventilation, especially in confined areas. Packaging and unloading areas and open processing equipment may require mechanical exhaust systems. Corrosion-proof construction recommended.

Personal Protective Equipment: Protective goggles, Face shield, Gas mask at concentrations in the air >> TLV. Protective clothing.

ALUMABRITE

| | |
|---------------------------|--|
| Skin and Body Protection: | Wear suitable protective clothing. Wear acid-resistant suit with acid-resistant apron, boots. |
| Hand Protection: | Impermeable protective gloves, such as nitrile, neoprene, or PVC. Wear gauntlet gloves. Check glove manufacturer's permeation/degradation information. |
| Respiratory Protection: | Use NIOSH approved supplied air respirator or self-contained breathing apparatus whenever exposure may exceed established OEL. Use respirator approved for acid fumes and mist. |
| Eye/Face Protection: | Splash proof chemical goggles. Face shield. For increased protection, use supplied air acid hood. |
| Hygienic Measures: | Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water. |
| Other/Type | Eye wash station and safety shower should be located near the work station. |

Section 9. Physical and Chemical Properties

Appearance:

| | |
|------------------------------------|---|
| Physical State: | Liquid |
| Colour: | Blue |
| Odour: | Acidic odour |
| Odour Threshold: | Not determined |
| pH: | 1 - 3 |
| Melting Point: | -17.5 – 4.6 °C (0.5 – 40.3 °F) (75 – 80%) estimated |
| Freezing Point: | Not Determined |
| Initial Boiling Point: | 158 °C (316 °F) (85%) estimated |
| Boiling Range: | (121- 144) °C (250-291 °F) (60-80%) estimated |
| Flash Point: | Not Determined |
| Evaporation Rate: | Not Determined |
| Flammability (Solid, Gas): | Not Flammable |
| Upper Explosive (Flammable) Limit: | Not Explosive |
| Lower Explosive (Flammable) Limit: | Not Explosive |
| Vapour Pressure: | 4 – 11 mm Hg @25 °C (77 °F) estimated |
| Vapour Density (Air = 1): | 3.4 estimated |
| Relative Density (Water=1): | 1.5 – 1.6 @25 °C (77 °F) estimated |

ALUMABRITE

| | |
|------------------------------|--|
| Solubility in Water (% w/w): | Completely miscible |
| Partition Coefficient: | Not determined |
| Auto-Ignition Temperature: | Not determined |
| Decomposition Temperature: | No determined |
| Viscosity | 7.2-16 cP @40°C (104°F) estimated 12-33 cP @20°C (68°F) estimated |

Section 10. Stability and Reactivity

| | |
|-------------------------------------|--|
| Reactivity: | Material is hygroscopic. Acidic liquids, such as this material may react with metals and release hydrogen gas. |
| Chemical stability: | Stable at standard temperature and pressure. |
| Possibility of Hazardous Reactions: | No dangerous reaction known under conditions of normal use. Hazardous polymerization will not occur. |
| Conditions to Avoid: | Protect from moisture. Avoid high temperatures |
| Incompatible Materials: | Avoid contact with bases |
| Hazardous Decomposition Products: | Under conditions of fire this material may produce: Oxides of phosphorus: Phosphine |

Section 11. Toxicological Information

Routes of Exposure: Inhalation, Skin Contact, Eye Contact and Ingestion

Acute Toxicity:

| | |
|-------------|---|
| Skin | LD50 – Rabbit – 4,567 mg/kg (estimated) |
| Eyes | Not Available |
| Respiratory | Not Available |
| Ingestion | LD50 – Rat – 2,550 mg/kg (estimated) |

Skin Corrosion/Irritation: Causes severe burns and eye damage

Serious Eye Damage/irritation: Causes serious eye damage

STOT (Specific Target Organ Toxicity) – Single Exposure: May cause damage to the following organs: kidneys, liver, blood, skin, eyes, bone marrow, heart, gastrointestinal tract, cardiovascular system, central nervous system (CNS).

ALUMABRITE

Respiratory and-or Skin Sensitization: May cause an allergic skin reaction. Very hazardous in case of ingestion and or inhalation.

Carcinogenicity:

No components of this product present at levels greater or equal to 0.1% is identified as probable, possible to confirmed by IARC, ACGIH, NTP or OSHA.

Reproductive Toxicity: Not Determined

Development of Offspring: Not Determined

Sexual Function and Fertility: Not Determined

Effects on or via Lactation: Not Determined

Germ Cell: Not Determined

Mutagenicity: Not Determined

Interactive Effects: Not Determined

Section 12. Ecological Information

Bioaccumulative Potential: Not measured

Mobility in Soil: No data available

Ecotoxicity:

| | |
|--|---|
| EPA Ecological Toxicity rating: | High |
| Acute Toxicity to Fish: | (<i>L.macrochirus</i> (bluegill sunfish) 96 hr. static: LC50 = pH 3.0 – 3.5 (estimated) |
| Chronic Toxicity to Fish: | No data available |
| Acute Toxicity to Aquatic Invertebrates: | (<i>Daphnia magna</i>) 12 hr. static: EC 50 = pH 4.6 (estimated) (<i>Daphnia pulex</i>) 12 hr. static EC 50 = pH 4.1 (estimated) (<i>Gammarus pulex</i>) 12 hr. static LC 50 = pH 3.4 (estimated) |
| Chronic Toxicity to Aquatic Invertebrates: | No data available |
| Acute Toxicity to Aquatic Plants: | No data available |
| Toxicity to Bacteria: | (Activated Sludge); EC 50 = pH 2.55 (estimated) |
| Toxicity to Soil dwelling Organisms: | No data available |
| Toxicity to Terrestrial Plants: | (Peas, beans, beets. Rapeseed and weeds) Sprayed with 15-20% solution of H3PO4: Foliage was destroyed on all plants. |

Environmental Fate:

Stability in water: Ionic dissociation in water.

ALUMABRITE

| | |
|-----------------------------|--|
| Stability in Soil: | Dissolves some soil material (carbonates). |
| Transport and Distribution: | Under acidic soil conditions, sparsely soluble phosphates tend to solubilize and may migrate to water. |
| Toxicity: | Inorganic phosphate have the potential to increase the growth of freshwater algae, whose eventual death will reduce the available oxygen for aquatic life. |
| Degradation Products: | |
| Biodegradation: | Under anaerobic conditions, microorganisms may degrade the product to phosphine. |
| Photo degradation: | No data available. |

Section 13. Disposal Considerations

Disposal Considerations:

| | |
|----------------------------------|---|
| Sewage disposal recommendations: | Do not empty into drains. This material is hazardous to the aquatic environment. Keep out of sewers and waterways. Avoid release to the environment |
| Waste Disposal: | Dispose of waste materials in accordance with local, provincial and federal regulations. Place in an appropriate container and dispose of the contaminated material at a licensed site. Handle contaminated packages in the same way as the substance itself. |

Section 14. Transport Information

The shipper/consignor/sender is responsible to ensure that the packaging, labeling and markings are in compliance with the selected mode of transport.

| Regulation | UN No: | Proper Shipping Name | Technical Name (for N.O.S entry) | Transport Hazard Class(es) | Packing Group |
|--|--------|----------------------|----------------------------------|----------------------------|---------------|
| Corrosive Material, Corrosive substances | 1760 | Hydrofluoric Acid | Hydrofluoric Acid Solution | 8 | III |

Land Transport (TDG)

CLASS 8 UN 1760 P.G. III
Corrosive material, Corrosive Substances
N.O.S (Hydrofluoric Acid Solution)

Section 15. Regulatory Information

Safety, Health and Environmental Regulations:

Workplace Classification: This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Occupational Safety and Health Administration's interpretation of the product's hazard to workers.

| | |
|----------------------------|--|
| TSCA Inventory Status | Ingredients are listed on the TSCA inventory |
| DSCL (EEC) | All ingredients are listed on the DSCL inventory |
| California Propositions 65 | Not Listed |
| SARA 302 | Not listed |
| SARA 304 | Not listed |
| SARA 311 | Acute health hazard, Chronic health hazard |
| SARA 312 | Acute health hazard, Chronic health hazard |
| SARA 313 | Not listed |
| WHMIS Canada | Class E: Corrosive Material |

Section 16. Other Information

Prepared By: Regulatory Affairs

Telephone: (905)731-3622

Date: December 21, 2017

To the best of our knowledge, the information provided in this Safety Data Sheet is accurate at the date of publication. However, neither the supplier nor manufacturer, assumes any liability whatsoever 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 hazards that exist.