

Safety Data Sheet

Section 01 Identification

Product Identifier Non-Etching Aluminum Brightener

Other Means of Identification Not available

Product Use and Restrictions on Use

Acid cleaner

Initial Supplier Identifier ClearTech Industries Inc

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24-Hour Emergency Phone 306.664.2522

Section 02 Hazard Identification

Physical Hazards

Corrosive to metals Category 1

Health Hazards

Skin corrosion / irritation Category 1

Signal Word

Danger

Hazard Statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Pictograms



Precautionary Statements

Prevention

P234 Keep only in original packaging.

P260 Do not breathe vapours, fumes, and mists.

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P264 Wash affected body parts thoroughly after handling.

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

Response

P301 P330 P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 P361 P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or

P363 shower. Wash contaminated clothing before reuse.

P304 P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a

POISON CENTER or doctor.

P305 P351 P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P390 Absorb spillage to prevent material damage.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents / container in accordance with all federal, provincial and / or local regulations including the Canadian Environmental Protection Act.

Hazards Not Otherwise Classified

Not available

Supplemental Information

Not available

Section 03 Composition / Information on Ingredients

Hazardous Ingredients:

Chemical name	Common name(s)	CAS number	Concentration (w/w%)
Orthophosphoric acid	Phosphoric acid	7664-38-2	7-13%*
Sulphuric acid	Sulphuric acid	7664-93-9	10-30%*

^{*}Exact concentration withheld as a trade secret.

Section 04 First-Aid Measures

Description of necessary first-aid measures

Inhalation Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON

CENTER or doctor. If breathing has stopped, trained personnel should begin rescue breathing or if the heart has stopped, immediately start cardiopulmonary resuscitation (CPR) or automated external defibrillation

(AED). Avoid mouth to mouth contact by using a barrier device.

Ingestion Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. If vomiting occurs

naturally, lie on your side, in the recovery position.

Skin Avoid direct contact. Wear chemical protective clothing, if necessary. Take off immediately contaminated contact clothing, shoes and leather goods. Rinse skin with lukewarm, gently flowing water / shower for 30 minutes.

Immediately call a POISON CENTER or doctor. Wash contaminated clothing before re-use, or discard.

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Eye contact Avoid direct contact. Wear chemical protective gloves, if necessary. Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 30 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a POISON CENTER or doctor.

Most important symptoms and effects, both acute and delayed

Causes severe burns to the mouth and throat (mist). Inhalation

Ingestion Causes burns to the mouth and throat.

Skin contact Causes severe skin burns. Eye contact Causes serious eye damage.

Further information For further information see Section 11 Toxicological Information.

Section 05 Fire Fighting Measures

Suitable extinguishing media Extinguish fire using extinguishing agents suitable for the surrounding fire.

Unsuitable extinguishing

media

Not available

Specific hazards arising from the chemical

In the event of a fire oxides of carbon may be released.

for fire-fighters

Special protective equipment Wear NIOSH-approved self-contained breathing apparatus and chemical-protective

clothing.

Section 06 Accidental Release Measures

Personal Precautions / **Protective Equipment / Emergency Procedures** Wear appropriate personal protective equipment (See Section 08 Exposure Controls and Personal Protection). Stay upwind, ventilate area. Do not breathe vapours, fumes, and mists. Do not use material handling equipment with exposed metal surfaces.

Environmental Precautions

Prevent material from entering waterways, sewers or confined spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes.

Methods and Materials for Containment and Cleaning Up

SMALL SPILLS: Stop or reduce leak if safe to do so. Clean up spill with non-reactive absorbent and place in suitable, covered, labeled containers. Flush area with water. Contaminated absorbent material may pose the same hazards as the spilled product. LARGE SPILLS: Contact fire and emergency services and supplier for advice.

Section 07 Handling and Storage

Precautions for Safe Handling

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Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Prevent the release of vapours, fumes, and mists into the workplace air. Inspect containers for damage or leaks before handling. If the original label is damaged or missing replace with a workplace label. Never add water to a corrosive. Always add corrosives to water. When mixing with water, stir small amounts in slowly. Use cold water to prevent excessive heat generation. Have suitable emergency equipment for fires, spills and leaks readily available.

Customer Service: 800.387.7503 www.cleartech.ca Emergency: 306.664.2522 **Conditions for Safe Storage** Store in a cool, dry, well-ventilated area, out of direct sunlight, away from heat sources and

> incompatible materials. Always store in original labeled container. Keep containers tightly closed when not in use and when empty. Empty containers may contain hazardous residues. Protect label and keep it visible. Do not transfer to metal containers.

Incompatibilities Bases, such as potassium hydroxide, sodium hydroxide, calcium hydroxide (slaked lime),

ammonia, carbonates.

Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids,

hypochlorites and permanganates.

Section 08 Exposure Controls and Personal Protection

Exposure limits

Component	Regulation	Type of listing	Value
Sulphuric acid	ACGIH	TLV-TWA	0.2 mg/m ³
	ACGIH	TLV-STEL	3 mg/m³
Phosphoric acid	ACGIH	TLV-STEL	3 mg/m³
	NIOSH	TWA	1 mg/m³

Engineering controls

Ventilation Requirements Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and

control of process conditions should be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by

exhaust systems.

Other An emergency shower and eyewash station should be available, tested, and be in close

proximity to the product being handled in accordance with provincial regulations.

Protective equipment

The following are recommendations only. It is the responsibility of the employer / user to conduct a hazard assessment of the process in which this product being used and determine the proper engineering controls and PPE for their process. Additional regulatory and safety information should be sought from local authorities and, if needed, a professional industrial hygienist.

Eye and face protection Where there is potential eye or face exposure, tightly fitting safety goggles and a face

> shield or a full face respirator or similar protective equipment which protects the wearer's face and eyes are recommended. Contact lenses are not recommended; they may

contribute to severe eye injury.

Hand and body protection Disposable latex or nitrile gloves are recommended to prevent incidental contact. Butyl

rubber, neoprene, or PVC skin protection is recommended for extended contact. Leather

gloves are not recommended for chemical protection. Refer to manufacturer's

specifications for breakthrough times and permeability information; note that breakthrough times and permeability vary with temperature, application and age of material. Continued use of contaminated safety gear or clothing is not recommended; wash before reuse or

discard.

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment.

Thermal hazards Not available

Section 09 Physical and Chemical Properties

Appearance

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Physical state Liquid

Colour Pink, transparent

Odour Odourless

Odour threshold Not available

Property

pH <1

Melting point / freezing point Not available

Initial boiling point and

boiling range

Not available

Flash point Not available

Evaporation rate Not available

Flammability Not applicable

Upper flammable limit Not available

Lower flammable limit Not available

Vapour pressure Not available

Vapour density Not available

Relative density Not applicable

Solubility Soluble in water

Partition coefficient: n-

octanol/water

Not available

Auto-ignition temperature Not available

Decomposition temperature Not available

Viscosity Not available

Specific gravity ~1.098 g/mL

Formula Not applicable

Molecular weight Not applicable

Section 10 Stability and Reactivity

Reactivity May be corrosive to metals.

Stability This product is stable if stored according to the recommendations in Section 07.

Possibility of hazardous

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reactions

Hazardous polymerization will not occur.

Conditions to avoid Avoid contact with incompatible materials.

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Incompatible materialsBases, such as potassium hydroxide, sodium hydroxide, calcium hydroxide (slaked lime),

ammonia, carbonates.

Oxidizing agents, such as oxygen, hydrogen peroxide, sulphuric and nitric acids,

hypochlorites and permanganates.

Hazardous decomposition

products

Thermal decomposition may produce oxides of carbon.

Section 11 Toxicological Information

Acute Toxicity (LD50 values)

Component	Route	Species	Value	Exposure time
Sulphuric acid	Oral	Rat	2140 mg/kg	
	Inhaltion	Mouse	375 mg/kg	4 hours
Phosphoric acid	Oral	Rat	1530 mg/kg	

Toxic Health Effect Summary

Chemical

The primary toxic affects of this product are expected to be due to it's low pH

characteristics

Skin Causes severe skin burns.

Ingestion Causes burns to the mouth and throat.

Inhalation Causes severe burns to the mouth and throat (mist).

Eye contact Causes serious eye damage.

This product and its components at their listed concentration have no known sensitizing effects.

Mutagenicity

This product and its components at their listed concentration have no known mutagenic effects.

This product and its components at their listed concentration have no known carcinogenic effects.

This product and its components at their listed concentration have no known carcinogenic effects.

Reproductive toxicity

This product and its components at their listed concentration have no known reproductive effects.

Specific organ

Aspiration hazard

This product and its components at their listed concentration have no known effects on specific

toxicity organs.

Synergistic materials

Not available Not available

Section 12 Ecological Information

Ecotoxicity

there is no available toxicity data for this product.

BiodegradabilityThe domestic substance list categorizes sulphuric and phosphoric acids as persistent.

BioaccumulationThe domestic substance list categorizes sulphuric and phosphoric acids as non-

bioaccumulative.

MobilityThis product is water soluble, and will not adsorb to soil and may contaminate ground

water.

Other adverse effects Not available

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Section 13 Disposal Considerations

Waste From Residues / **Unused Products**

Dispose in accordance with all federal, provincial, and local regulations including the

Canadian Environmental Protection Act.

Do not remove label, follow label warnings even after the container is empty. Empty Contaminated Packaging

containers should be recycled or disposed of at an approved waste handling facility.

Section 14 Transport Information

UN number UN3264

UN proper shipping name and description

CORROSIVE LIQUID, ACIDIC, INORGANIC N.O.S. (PHOSPHORIC ACID,

SULPHURIC ACID)

Transport hazard class(es) 8

Ш Packing group

Excepted quantities Not available

Environmental hazards Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.

Special precautions 16 (1) The technical name of at least one of the most dangerous substances that

> predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag

following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4

(Dangerous Goods Safety Marks).

Transport in bulk ERAP index: not available

MARPOL 73/78 and IBC Code:

This product is not listed in Chapter 17 of the IBC Code.

Additional information Secure containers (full or empty) during shipment and ensure all caps, valves, or closures

are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 16 of this SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and published test data regarding the classification of this product are listed in the references at section 16 of this SDS.

Section 15 Regulatory Information.

NOTE: THE PRODUCT LISTED ON THIS SAFETY DATA SHEET HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN HAZARDOUS PRODUCTS REGULATIONS. THIS SAFETY DATA SHEET CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

All components of this product appear on the domestic substance list.

Section 16 Other Information

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Note: The responsibility to provide a safe workplace remains with the buyer / user. The buyer / user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the buyer / user to comply with all applicable laws and regulations regarding handling, using, reselling and shipping this product.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the RDC Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) TOXNET
- 3) eChemPortal
- 4) ECHA
- 5) Transportation of Dangerous Goods Canada
- 6) HSDB
- 7) PAN

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