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## Section 01 Identification

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<b>Product Identifier</b>	Sulphamic Acid Solution, Inhibited
<b>Other Means of Identification</b>	Not available
<b>Product Use and Restrictions on Use</b>	Descaler
<b>Initial Supplier Identifier</b>	ClearTech Industries Inc 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7  Phone: 800.387.7503 Fax: 888.281.8109 <a href="http://www.cleartech.ca">www.cleartech.ca</a>
<b>Prepared By</b>	ClearTech Industries Inc. technical writer
<b>24-Hour Emergency Phone</b>	306.664.2522

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## Section 02 Hazard Identification

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### Physical Hazards

This product does not qualify for any physical hazard class under WHMIS 2015

### Health Hazards

**Skin corrosion / irritation** Category 1

### Signal Word

**Danger**

### Hazard Statements

H314 Causes severe skin burns and eye damage.

### Pictograms



### Precautionary Statements

#### Prevention

- P260 Do not breathe vapours, fumes, or mists.
- 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 P340 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.

## 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

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## Section 03 Composition / Information on Ingredients

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### Hazardous Ingredients:

Chemical name	Common name(s)	CAS number	Concentration (w/w%)
Sulphamic acid	Amidosulfonic acid	5329-14-6	10-30%

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## Section 04 First-Aid Measures

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### 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 contact** Avoid direct contact. Wear chemical protective clothing, if necessary. Take off immediately contaminated clothing, shoes and leather goods. Rinse skin with lukewarm, gently flowing water / shower for Immediately call a POISON CENTER or doctor. Wash contaminated clothing before re-use, or discard.
- 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 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

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

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## Section 05 Fire Fighting Measures

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**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 sulphur and hydrogen chloride may be released. Thermal decomposition occurs at ~205 °C.  
**Special protective equipment for fire-fighters** Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

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## Section 06 Accidental Release Measures

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**Personal Precautions / Protective Equipment / Emergency Procedures** Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so.  
**Environmental Precautions** Prevent material from entering 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: 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.

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## Section 07 Handling and Storage

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**Precautions for Safe Handling** 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. Avoid generating vapours, fumes, or mists. Prevent the release of vapours, fumes, or 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 return contaminated material to its original container. Have suitable emergency equipment for fires, spills and leaks readily available.  
**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.  
**Incompatibilities** Strong bases. Strong oxidizers. Reacts violently with chlorine and nitric acid.

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## Section 08 Exposure Controls and Personal Protection

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### Exposure limits

There are no known exposure limits for this product.

### 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** Where handling this product it is recommended that chemically resistant gloves are worn. Resistance of specific materials can vary from product to product. Breakthrough times are obtained under conditions of continuous contact, generally at room temperature. Evaluate resistance under conditions of use and maintain protective clothing. Where there is potential for contact with clothing or skin, rubber boots and sufficient body protection, such as: a chemical body suit or an apron and coveralls of chemical resistant material, are recommended. 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

**Physical state** Liquid  
**Colour** Colourless to light yellow  
**Odour** Odourless  
**Odour threshold** Not applicable

### Property

**pH** <1.0  
**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

<b>Upper flammable limit</b>	Not available
<b>Lower flammable limit</b>	Not available
<b>Vapour pressure</b>	Not available
<b>Vapour density</b>	Not available
<b>Relative density</b>	Not applicable
<b>Solubility</b>	Soluble in water
<b>Partition coefficient: n-octanol/water</b>	LogP 0.10
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	~205 °C
<b>Viscosity</b>	Not available
<b>Specific gravity</b>	1.084 @ 20 °C
<b>Formula</b>	Mixture
<b>Molecular weight</b>	Not applicable

## Section 10 Stability and Reactivity

<b>Reactivity</b>	This product is a strong acid.
<b>Stability</b>	Slowly hydrolyzes to form ammonium bisulphate.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid</b>	Avoid contact with incompatible materials. Do not heat.
<b>Incompatible materials</b>	Strong bases. Strong oxidizers. Reacts violently with chlorine and nitric acid.
<b>Hazardous decomposition products</b>	Thermal decomposition may produce oxides of sulphur and hydrogen chloride. Thermal decomposition occurs at ~205 °C.

## Section 11 Toxicological Information

### Acute Toxicity (LD50 values)

Component	Route	Species	Value	Exposure time
ATE of product	Oral	Mouse	>5000 mg/kg	

### Toxic Health Effect Summary

<b>Chemical characteristics</b>	This product is a strong acid.
<b>Skin</b>	Causes severe skin burns.
<b>Ingestion</b>	Causes burns to the mouth and throat. Not available
<b>Inhalation</b>	Causes severe burns to the mouth and throat (mist).

<b>Eye contact</b>	Causes serious eye damage.
<b>Sensitization</b>	This product and its components at their listed concentration have no known sensitizing effects.
<b>Mutagenicity</b>	This product and its components at their listed concentration have no known mutagenic effects.
<b>Carcinogenicity</b>	This product and its components at their listed concentration have no known carcinogenic effects.
<b>Reproductive toxicity</b>	This product and its components at their listed concentration have no known reproductive effects.
<b>Specific organ toxicity</b>	This product and its components at their listed concentration have no known effects on specific organs.
<b>Aspiration hazard</b>	Not available
<b>Synergistic materials</b>	Not available

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## Section 12 Ecological Information

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### Ecotoxicity

there is no available toxicity data for this product.

Percentage of product with unknown environmental toxicity: 16%

<b>Biodegradability</b>	This product contains inorganic salts that are already present in the environment.
<b>Bioaccumulation</b>	This product is not expected to bioaccumulate.
<b>Mobility</b>	This product is water soluble, and will not adsorb to soil and may contaminate ground water.
<b>Other adverse effects</b>	Not available

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## Section 13 Disposal Considerations

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<b>Waste From Residues / Unused Products</b>	Dispose in accordance with all federal, provincial, and local regulations including the Canadian Environmental Protection Act.
<b>Contaminated Packaging</b>	Do not remove label, follow label warnings even after the container is empty. Empty containers should be recycled or disposed of at an approved waste handling facility.

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## Section 14 Transport Information

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<b>UN number</b>	UN3264
<b>UN proper shipping name</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
<b>Transport hazard class(es)</b>	8
<b>Packing group</b>	III
<b>Excepted quantities</b>	5 L
<b>Environmental hazards</b>	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
<b>Special precautions</b>	No special provisions
<b>Transport in bulk</b>	Not available

**Additional information**                      Secure containers (full or empty) with suitable hold down devices 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.

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## Section 15 Regulatory Information

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**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.**

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## Section 16 Other Information

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**Date of latest revision: May 02, 2019**

**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