

**Section 1: Product & Company Information**

**Product Identifier:** Sulfamic Acid 15%

**Other Means of Identification**

Product Number: No data available.

**Recommended Use and Restrictions on Use**

Recommended Use: De-Scaling  
Restrictions on Use: No Data Available.

**Manufacturer / Importer / Supplier / Distributor Information**

**Company Name:** CORECHEM Inc.

**Address:** 4320 Greenway Drive  
Knoxville, TN 37918  
USA

**Information Telephone Number:** 1-865-524-4239

**Fax Number:** 1-865-524-3375

**Website:** www.corecheminc.com

**Contact Person:** Regulatory Manager

**E-mail:** regulatory@corecheminc.com

**Emergency Phone Number:** Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

**Section 2: Hazards Identification**

**GHS Hazard Classification(s)**

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

**Physical Hazard(s)**

Not classified.

**Health Hazard(s)**

Corrosion/Irritation, Skin - 3  
(Corrosion)Damage/Irritation, Eye - 2B

**Environmental Hazard(s)**

Not classified.

**Label Elements**

**Signal Word**

**WARNING**

**Hazard Symbol(s)**

No symbol

**Hazard Statement(s)**

H316: Causes mild skin Irritation.  
H320: Causes eye Irritation.

**Precautionary Statements**

**General**

Not applicable.

**Prevention**

P264: Wash face, hands and any exposed skin thoroughly after handling.

**Response**

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332 + P313: If skin irritation occurs: Get medical advice/attention.  
P337 + P313: If eye irritation persists: Get medical advice/attention.

**Storage**

Not applicable.

**Disposal**

Not applicable.

**Hazard(s) not otherwise classified (HNOC)**

None known.

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

Substance

Chemical Identity <sup>2</sup>	Common Name/Synonym(s)	CAS # <sup>3</sup>	Weight %	Impurity or Stabilizing Additive
Sulfamic acid	-	5329-14-6	12-17	No

- Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
- Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
- "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

## Section 4: First-Aid Measures

### General Information

Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

### Inhalation

Move to fresh air. Get medical attention if symptoms persist.

### Skin Contact

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

### Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

### Ingestion

Rinse mouth thoroughly. Do NOT induce vomiting. Call a poison control center or doctor/physician if you feel unwell.

### Most important symptoms/effects, acute and delayed

#### Symptoms

Causes severe skin and eye burns. Causes digestive tract burns.

### Indication of immediate medical attention and special treatment needed

#### Hazards

No data available.

#### Treatment

Treat symptomatically. Symptoms may be delayed.

## Section 5: Fire-Fighting Measures

### General Fire Hazards

In case of fire and/or explosion do not breathe fumes.

### Suitable (and Unsuitable) Extinguishing Media

#### Suitable Extinguishing Media

use any means suitable for extinguishing surrounding fire.

#### Unsuitable Extinguishing Media

No data available.

### Specific Hazards Arising from the Chemical

not considered to be a fire or explosion hazard.

### Special Protective Equipment and Precautions for Firefighters

#### Special Fire-Fighting Equipment Procedures

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

#### Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

## Section 6: Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency Procedures

Keep unauthorized personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. See Section 8 of the MSDS for Personal Protective Equipment.

### Methods and Materials for Containment and Clean-Up

Dike or otherwise contain large spills. Small spills may be controlled using common floor absorbent. Cover the spill with Sodium Carbonate or a soda Ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to be drain with excess water. Treat the solid residue as normal refuse. Wash site with soda ash solution. Always dispose of in accordance with local regulations.

### Notification Procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

### Environmental Precautions

Avoid discharge into drains, water courses or onto the ground.

## Section 7: Handling and Storage

### Precautions for Safe Handling

Use caution when handling/transferring. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist or vapor. Use only with adequate ventilation. Wear appropriate personal protective equipment. Transfer and storage systems should be compatible. Observe good industrial hygiene practices.

### Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Value	Source
Sulfamic Acid	TWA	1 mg/m <sup>3</sup>	US ACGIH Threshold Limit Values
Sulfamic Acid	TWA	1mg/m <sup>3</sup>	US OSHA Table Z-1

#### Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

### Appropriate Engineering Controls

No data available.

### Individual protection measures, such as personal protective equipment (PPE)

#### General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

#### Eye/Face Protection

Wear safety glasses with side shields.

#### Skin Protection

##### Hand Protection

Wear appropriate chemical resistant gloves.

##### Other

Wear appropriate chemical resistant clothing.

#### Respiratory Protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

#### Hygiene Measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

## Section 9: Physical and Chemical Properties

### Appearance:

Physical State: Liquid  
Color: Clear colorless

### Odor:

Faint Odor

### Odor Threshold:

No data available.

### pH:

<2

### Melting Point/Freezing Point:

No data available.

### Initial Boiling Point and Boiling Range:

212°F

### Flash Point:

Not applicable.

### Evaporation Rate (butyl acetate=1):

No data available.

### Flammability (solid, gas):

No data available.

### Upper/Lower Limit on Flammability or Explosive Limits

Flammability Limit – Upper: Not applicable.

Flammability Limit – Lower: Not applicable.

Explosive Limit – Upper: Not applicable.

Explosive Limit – Lower: Not applicable.

### Vapor Pressure:

No data available.

### Vapor Density (air =1):

No data available.

### Relative Density (water=1):

1-1.1

### Solubility(ies):

Solubility in water: Complete

Solubility (other): No data available.

**Partition coefficient (n-octanol/water):** No data available.  
**Auto-Ignition Temperature:** No data available.  
**Decomposition Temperature:** No data available.  
**Viscosity:** No data available.

**Other Information:**

Molecular Weight: No data available.  
Formula: No data available.

### Section 10: Stability and Reactivity

**Reactivity**

No dangerous reaction known under conditions of normal use.

**Chemical Stability**

Slowly Hydrolyzes to Form Ammonium Bisulfate.

**Possibility of Hazardous Reactions**

Hazardous polymerization does not occur.

**Conditions to Avoid**

Contact with incompatible materials.

**Incompatible Materials**

Strong oxidizers, Nitric Acid, Chlorine, Strong bases.

**Hazardous Decomposition Products**

Ammonia and oxides of Sulfur, Nitrogen, and Carbon

### Section 11: Toxicological Information

**Information on routes of exposure**

**Ingestion:** Not Applicable.

**Inhalation:** Not Applicable.

**Skin Contact:** Causes Skin burns.

**Eye Contact:** Causes Eye damage.

**Information on Toxicological Effects**

**Acute Toxicity (List all possible routes of exposure)**

**Oral**

No data available.

**Dermal**

No data available.

**Inhalation**

No data available.

**Repeated Dose Toxicity**

No data available.

**Skin Corrosion/Irritation**

Causes skin burns.

**Serious Eye Damage/Eye Irritation**

Causes eye damage.

**Respiratory/Skin Sensitization**

Not a skin sensitizer.

**Carcinogenicity**

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**US. National Toxicology Program (NTP) Report on Carcinogens**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Germ Cell Mutagenicity**

**In Vitro**

No mutagenic components identified.

**In Vivo**

No mutagenic components identified.

**Reproductive Toxicity**

None known.

**Specific Target Organ Toxicity – Single Exposure**

None known.

**Specific Target Organ Toxicity – Repeated Exposure**

None known.

**Aspiration Hazard**

Not classified.

**Other Effects**

None known.

## Section 12: Ecological Information

**Ecotoxicity**

**Acute Hazards to the Aquatic Environment**

**Fish**

Sulfamic Acid: LC 50 (Fathead minnow (Pimephales promelas), 96 h): 14.2 mg/l Mortality

**Aquatic Invertebrates**

No data available.

**Toxicity to Aquatic Plants**

No data available.

**Chronic Hazards to the Aquatic Environment**

**Fish**

No data available.

**Aquatic Invertebrates**

No data available.

**Toxicity to Aquatic Plants**

No data available.

**Persistence and Degradability**

**Biodegradation**

There are no data on the degradability of this product.

**BOD/COD Ratio**

No data available.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**

No data available on bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow)**

No data available.

**Mobility in Soil**

No data available.

**Other Adverse Effects**

No data available.

## Section 13: Disposal Considerations

**Disposal Instructions**

Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging**

Since emptied containers retain product residue, follow label warnings even after container is emptied.

## Section 14: Transportation Information

**US Department of Transportation (DOT)**

UN Number: UN1760

UN Proper Shipping Name: Corrosive liquids, n.o.s.

Technical Name: (contains sulfamic acid)

Hazard Class: 8

Subsidiary Hazard Risk: -

Packing Group: PGIII

DOT Label/Placard Exemptions: Not determined

Special Provisions: IB3, T7, TP1, TP28

Packaging Exceptions: 49CFR 173.154

Packaging Non-Bulk: 49CFR 173.203

Packaging Bulk: 49CFR 173.241

Reportable Quantity (RQ): -

Marine Pollutant: No

Poison Inhalation Hazard: No

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Emergency Response Guidebook (ERG) #: 154

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

## Section 15: Regulatory Information

### US Federal Regulations

#### Toxic Substances Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

#### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

#### Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

#### Emergency Planning and Community Right-To-Know Act (EPCRA)

##### EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

##### EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

##### EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No

Sudden Release of Pressure: No

Reactive: No

Acute (Immediate) Health Hazard: Yes

Chronic (Delayed) Health Hazard: No

##### EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

#### California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

*Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.*

## Section 16: Other Information

### Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 2

Chronic Health Hazard: /

Flammability: 0

Physical Hazard: 0

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

### National Fire Protection Association (NFPA 704) Rating

Health Hazard: 2

Fire Hazard: 0

Reactivity Hazard: 0

Special: N/A W OX COR POI

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

Prepared By: Regulatory Manager

Version #: 001

Issue Date: July 14, 2017

Revision Date: -

Revisions: -

### Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate

BCF - Bioconcentration Factor

EC50 - Effective concentration, 50%

IDHL - Immediately Dangerous to Life and Health

Kg - Kilogram

l - Liter

lb - Pound

ACGIH - American Conference of Industrial Hygienists

AIHA - American Industrial Hygiene Association

BEI - Biological Exposure Indices

CAS - Chemical Abstracts Service

DOT - US Department of Transportation

EPA - US Environmental Protection Agency

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

LC50 - Lethal Concentration, 50%  
LD50 - Lethal Dose, 50%  
mg - milligram  
ml - milliliter  
N/A - Not Applicable  
N/D - Not Determined  
PEL - Permissible Exposure Limit  
REL - Recommended Exposure Limit  
STEL - Short-term Exposure Limit  
TWA - Time weighted average

IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association  
IBC - Intermediate Bulk Container  
IMDG - International Maritime Dangerous Goods  
NIOSH - National Institute for Occupational Safety and Health  
NTP - National Toxicology Program  
OSHA - US Occupational Health and Safety Administration  
SARA - US EPA Superfund Amendments and Reauthorization Act  
TSCA - US EPA Toxic Substances Control Act  
UN - United Nations

**References**

HSDB® - Hazardous Substances Data Bank

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