Section 1 - Chemical Product and Company Identification

**MSDS Name:**
Sulfamic acid, ACS

**Catalog Numbers:**
LC25420

**Synonyms:**
Amidosulfonic acid, amidosulfuric acid, aminosulfonic acid, sulfamidic acid, sulphamic acid.

**Company Identification:**
LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

**Company Phone Number:**
(412) 826-5230

**Emergency Phone Number:**
(800) 424-9300

**CHEMTREC Phone Number:**
(800) 424-9300

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5329-14-6</td>
<td>Sulfamic acid</td>
<td>100%</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**Emergency Overview**

*Appearance: White powder*

*Warning!* Causes eye, skin, and respiratory tract irritation and possible burns. Corrosive to metal in aqueous solution.

*Target Organs:* Eyes, skin, mucous membranes.

**Potential Health Effects**

*Eye:*
Causes eye irritation. Concentrated solutions may produce corrosive effects.

*Skin:*
Causes skin irritation. Concentrated solutions may produce corrosive effects.

*Ingestion:*
May cause irritation or burns of the digestive tract with nausea, vomiting, and diarrhea.

*Inhalation:*
Cause respiratory tract irritation.

*Chronic:*
Chronic inhalation or ingestion may cause effects similar to those of acute inhalation and ingestion.
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Sulfamic acid, ACS

Section 4 - First Aid Measures

Eyes:  
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:  
Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid at once.

Ingestion:  
Do not induce vomiting. If victim is conscious, give 2–4 glasses of water or milk. Get medical aid at once.

Inhalation:  
Give artificial respiration if necessary. Move victim to fresh air. Keep victim warm and at rest. Get medical aid at once.

Notes to Physician:  
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:  
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:  
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:  
No information found.

Flash Point:  
No information found.

NFPA Rating:  
Health-3; flammability-0; reactivity-0

Explosion Limits:  
Lower: n/a  Upper: n/a

Section 6 - Accidental Release Measures

General Information:  
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:  
Vacuum or sweep up material and place into a dry, suitable, closed disposal container. Clean up spills immediately. Avoid creating airborne particles. Provide ventilation.

Section 7 - Handling and Storage
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Handling:
Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation.

Storage:
Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfamic acid</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:
Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear appropriate protective eyeglasses or chemical safety goggles as described in 29 CFR 1910.133.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>White</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>pH:</td>
<td>1.18 (1% solution)</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing/Melting Point:</td>
<td>205°C (decomposes)</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>205°C</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Soluble</td>
</tr>
<tr>
<td>Specific Gravity/Density:</td>
<td>2.15 (Water = 1)</td>
</tr>
</tbody>
</table>
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Molecular Formula: H3NO3S
Molecular Weight: 97.09

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.

Conditions to Avoid:
Excess heat, dust generation.

Incompatibilities with Other Materials:
Strong oxidizing agents, strong bases, nitric acid, chlorine, attacks metals in the presence of moisture.

Hazardous Decomposition Products:
Oxides of sulfur, nitrogen oxides, ammonia and derivatives.

Hazardous Polymerization:
Has not been reported.

Section 11 - Toxicological Information

RTECS:
CAS# 5329-14-6: WO5950000

LD50/LC50:
CAS# 5329-14-6:
Draize test, rabbit, eye: 20mg Moderate;
Draize test, rabbit, eye: 250ug/24H Severe;
Draize test, rabbit, skin: 500mg/24H Severe;
Oral, mouse: LD50 = 1312 mg/Kg;
Oral, rat: LD50 = 3160 mg/Kg.

Carcinogenicity:
CAS# 5329-14-6: Not listed by ACGIH, IARC, NTP, or CA Proposition 65.

Epidemiology:
No information available.

Teratogenicity:
No information available.

Reproductive:
No information available.

Mutagenicity:
No information available.

Neurotoxicity:
No information available.

Section 12 - Ecological Information

No information available.
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Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Sulfamic acid
Hazard Class: 8
UN Number: UN2967
Packing Group: PGIII

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 5329-14-6 is listed on the TSCA inventory. Does not have a Significant New Use Rule.
SARA Reportable Quantities (RQ):
CAS# 5329-14-6 does not have a RQ.
CERCLA/SARA Section 313:
Not reportable under Section 313.
OSHA - Highly Hazardous:
Not considered highly hazardous by OSHA.

US State
State Right to Know:
CAS# 5329-14-6 is listed on the following state right to know list: New Jersey.
California Regulations:
Not listed.

European/International Regulations
Canadian DSL/NDSL:
CAS# 5329-14-6 is listed on Canada’s DSL List.
Canada Ingredient Disclosure List:
CAS# 5329-14-6 is listed on the Ingredient Disclosure List at 1%.

Section 16 - Other Information

MSDS Creation Date: August 24, 2006
Revision Date: None
Material Safety Data Sheet
Sulfamic acid, ACS

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