

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: March 11, 2019

Revision: March 04, 2019

## 1 Identification

- **Product identifier**
- **Trade name:** Sulfamic Acid
- **Product code:** DU11461000
- **CAS Number:**  
5329-14-6
- **Recommended use and restriction on use**
- **Recommended use:** Laboratory chemicals
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
AquaPhoenix Scientific, Inc.  
860 Gitts Run Road  
Hanover, PA 17331  
Phone: (717)632-1291  
Toll-Free: (866)632-1291  
info@aquaphoenixsci.com
- **Distributor:**  
Dubois Chemicals Inc.  
3630 East Kemper Rd  
Cincinnati, OH 45241  
(800) 438-2647
- **Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924 (North America)  
+1 (813)248-0585 (International)

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Met. Corr.1 H290 May be corrosive to metals.  
Eye Irrit. 2A H319 Causes serious eye irritation.
- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS05

- **Signal word:** Warning
- **Hazard statements:**  
H290 May be corrosive to metals.  
H319 Causes serious eye irritation.
- **Precautionary statements:**  
P264 Wash thoroughly after handling.  
P273 Avoid release to the environment.

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P280 Wear protective gloves and eye protection.  
 P302+P352 If on skin: Wash with plenty of water.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P362 Take off contaminated clothing.  
 P406 Store in corrosive resistant container with a resistant inner liner.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

## 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**  
5329-14-6 sulfamic acid

## 4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Brush off loose particles from skin.  
Immediately rinse with water.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Remove contact lenses if worn.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**  
Causes eye irritation.  
Causes mild skin irritation.  
Gastric or intestinal disorders when ingested.
- **Danger:**  
May be harmful if swallowed.  
No relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** No relevant information available.
- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**

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- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation.  
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Methods and material for containment and cleaning up**  
Pick up mechanically.  
Sweep up and place into an appropriate container.  
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling:** Use only in well ventilated areas.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**  
Store only in the original receptacle.  
Unsuitable material for receptacle: steel.  
Unsuitable material for receptacle: aluminium.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Do not store together with alkalis (caustic solutions).  
Store away from oxidizing agents.
- **Further information about storage conditions:**  
Keep containers tightly sealed.  
This product is hygroscopic.
- **Specific end use(s)** No relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be

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monitored at the workplace.

- **Exposure controls**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Engineering controls:** Provide adequate ventilation.

- **Breathing equipment:** Not required under normal conditions of use.

- **Protection of hands:**



Protective gloves

- **Material of gloves**

Nitrile rubber, NBR

Neoprene gloves

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Natural rubber, NR

Sensibilization by the components in the glove materials is possible.

- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Limitation and supervision of exposure into the environment**

No relevant information available.

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **Appearance:**

**Form:** Powder

**Color:** White

- **Odor:** Odorless

- **Odor threshold:** Not determined.

- **pH-value:** Not applicable.

- **Melting point/Melting range:** 205 °C (401 °F)

- **Boiling point/Boiling range:** Not determined.

- **Flash point:** The product is not flammable.

- **Flammability (solid, gaseous):** Product is not flammable.

- **Auto-ignition temperature:** Not determined.

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· <b>Decomposition temperature:</b>	Not determined.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits</b> <b>Lower:</b> <b>Upper:</b>	Not determined. Not determined.
· <b>Oxidizing properties:</b>	Non-oxidizing.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density at 20 °C (68 °F):</b> · <b>Relative density:</b> · <b>Vapor density:</b> · <b>Evaporation rate:</b>	2.13 g/cm <sup>3</sup> (17.77 lbs/gal) Not determined. Not applicable. Not applicable.
· <b>Solubility in / Miscibility with Water:</b>	Soluble.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity</b> <b>Dynamic:</b> <b>Kinematic:</b>	Not applicable. Not applicable.
· <b>Other information</b>	No relevant information available.

## 10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**  
Reacts with alkali (lyes).  
Corrosive action on metals.  
Reacts with oxidizing agents.  
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** No relevant information available.
- **Incompatible materials** No relevant information available.
- **Hazardous decomposition products**  
Under fire conditions only:  
Sulfur oxides (SO<sub>x</sub>)  
Nitrogen oxides (NO<sub>x</sub>)

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:**

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## 5329-14-6 sulfamic acid

Oral | LD50 | 3160 mg/kg (rat)

- **Primary irritant effect:**
- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eye:** Causes eye irritation.
- **Sensitization:** Based on available data, the classification criteria are not met.

### · IARC (International Agency for Research on Cancer):

Substance is not listed.

### · NTP (National Toxicology Program):

Substance is not listed.

### · OSHA-Ca (Occupational Safety & Health Administration):

Substance is not listed.

### · Probable route(s) of exposure:

Ingestion.  
Inhalation.  
Eye contact.  
Skin contact.

### · Acute effects (acute toxicity, irritation and corrosivity):

May be harmful if swallowed.  
Causes serious eye irritation.  
Causes mild skin irritation.

### · Repeated dose toxicity: No relevant information available.

### · Germ cell mutagenicity: Based on available data, the classification criteria are not met.

### · Carcinogenicity: Based on available data, the classification criteria are not met.

### · Reproductive toxicity: Based on available data, the classification criteria are not met.

### · STOT-single exposure: Based on available data, the classification criteria are not met.

### · STOT-repeated exposure: Based on available data, the classification criteria are not met.

### · Aspiration hazard: Based on available data, the classification criteria are not met.

## 12 Ecological information

### · Toxicity

#### · Aquatic toxicity

### 5329-14-6 sulfamic acid

LC50	70.3 mg/l (pimephales promelas)
EC50	71.6 mg/l (daphnia)
ErC50	48 mg/l (Desmodesmus subspicatus)

### · Persistence and degradability: No relevant information available.

### · Bioaccumulative potential: No relevant information available.

### · Mobility in soil: No relevant information available.

### · Additional ecological information

#### · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms

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Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably increased after use, the aqueous waste, emptied into drains, is only low water-dangerous.

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

· **Uncleaned packagings**

- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· **UN-Number**

· DOT, ADR/RID/ADN, IMDG, IATA UN2967

· **UN proper shipping name**

· DOT, IMDG, IATA SULPHAMIC ACID  
· ADR/RID/ADN 2967 SULFAMINSÄURE

· **Transport hazard class(es)**

· DOT



· Class 8

· Label 8

· ADR/RID/ADN



· Class 8 (C2)

· Label 8

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· **IMDG, IATA**



· **Class** 8  
 · **Label** 8

· **Packing group**

· **DOT, ADR/RID/ADN, IMDG, IATA** III

· **Environmental hazards**

Not applicable.

· **Special precautions for user**

Warning: Corrosive substances

· **Danger code (Kemler):**

80

· **EMS Number:**

F-A,S-B

· **Segregation groups**

Acids

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **DOT**

· **Quantity limitations**

On passenger aircraft/rail: 5 L

On cargo aircraft only: 60 L

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **United States (USA)**

· **SARA**

· **Section 302 (extremely hazardous substances):**

Substance is not listed.

· **Section 355 (extremely hazardous substances):**

Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

· **TSCA (Toxic Substances Control Act)**

Substance is listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemicals known to cause developmental toxicity for females:**

Substance is not listed.

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· **Chemicals known to cause developmental toxicity for males:**

Substance is not listed.

· **Chemicals known to cause developmental toxicity:**

Substance is not listed.

· **EPA (Environmental Protection Agency):**

Substance is not listed.

· **IARC (International Agency for Research on Cancer):**

Substance is not listed.

· **Canadian Domestic Substances List (DSL) (Substances not listed.):**

Substance is listed.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health Administration

Met. Corr. 1: Corrosive to metals – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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