according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.10.2015 Page 1 of 6

Sulfamic Acid, ACS

SECTION 1: Identification of the substance/mixture and of the supplier

Product name : Sulfamic Acid,ACS

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: \$25792

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education 15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2 Eye irritation, category 2A



Environmentally Damaging

Acute hazards to the aquatic environment, category 3 Chronic hazards to the aquatic environment, category 3

Skin irrit. 2 Eye irrit. 2A Aquatic AcTox. 3 Aquatic ChrTox. 3

Signal word : Warning

Hazard statements:

Causes skin irritation

Causes serious eye irritation

Harmful to aquatic life with long lasting effects

Precautionary statements:

Wash ... thoroughly after handling

Avoid release to the environment

Wear protective gloves/protective clothing/eye protection/face protection

IF ON SKIN: Wash with soap and water

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing

Specific treatment (see ... on this label)

If skin irritation occurs: Get medical advice/attention If eye irritation persists get medical advice/attention

Take off contaminated clothing and wash before reuse

Effective date: 01.10.2015

Sulfamic Acid, ACS

Dispose of contents/container to ...

Other Non-GHS Classification:

WHMIS NFPA/HMIS





Page 2 of 6

HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 5329-14-6	Sulfamic acid	>90 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation: Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen.Consult a physician.

After skin contact: Wash hands and exposed skin with soap and plenty of water. Consult a physician.

After eye contact: Rinse or flush exposed eye gently using water for 15-20 minutes. Consult a physician.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed:

Irritation.Headache.Shortness of breath.Nausea.;

Indication of any immediate medical attention and special treatment needed:

Provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Nitrogen oxides. Sulphur oxides.

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing. Refer to Section 8.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.10.2015 Page 3 of 6

Sulfamic Acid, ACS

Additional information (precautions): Avoid generating dust. Avoid breathing vapors, dust, mist, or gas. Further processing of solid materials may result in the formation of combustible dusts.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that dust-handling systems (exhaust ducts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area.

Environmental precautions:

Prevent from reaching drains, sewer, or waterway. Prevent further leakage or spillage. Should not be released into environment.

Methods and material for containment and cleaning up:

Sweep up and containerize for disposal. Avoid generating dust. Always obey local regulations. Sweep up and shovel. Keep in suitable closed containers for disposal. Follow proper disposal methods. Refer to Section 13.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Avoid dispersal of dust in the air. Do not clear dust on surfaces with compressed air. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Conditions for safe storage, including any incompatibilities:

Store product and empty container away from heat and sources of ignition. Keep container tightly closed in a cool, dry, and well-ventilated area. Store in inert atmosphere.

SECTION 8: Exposure controls/personal protection





Control Parameters: 5329-14-6, Sulfamic Acid, Contains no substances with occupational

exposure limit values.

Appropriate Engineering controls: Provide exhaust ventilation or other engineering controls to keep the

airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.Emergency eye wash fountains and safety showers should be

available in the immediate vicinity of use or handling.

Respiratory protection: Normal ventilation is adequate. Where risk assessment shows air-purifying

respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance. Select

glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and

good laboratory practices. Wear protective clothing.

Eye protection: Wear equipment for eye protection tested and approved under

appropriate government standards such as NIOSH (US) or EN

166(EU). Safety glasses or goggles.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.10.2015 Page 4 of 6

Sulfamic Acid, ACS

General hygienic measures:

Perform routine housekeeping to prevent dust generation.Do not eat, drink, smoke, or use personal products when handling chemical substances.Wash hands before breaks and immediately after handling the product.

SECTION 9: Physical and chemical properties

Appearance (physical state,color):	White solid	Explosion limit lower: Explosion limit upper:	Not Available Not Available
Odor:	Not Available	Vapor pressure:	0.008 hPa (0.006 mmHg) at 20°C; 0.025 hPa (0.019 mmHg) at 100°C
Odor threshold:	Not Available	Vapor density:	Not Available
pH-value:	1.5 at 10 g/l at 20°C	Relative density:	2.151 g/cm3 at 25°C
Melting/Freezing point:	215 - 225°C	Solubilities:	Solube in water: 213 g/l at 20°C
Boiling point/Boiling range:	Not Available	Partition coefficient (noctanol/water):	Not Available
Flash point (closed cup):	Not Available	Auto/Self-ignition temperature:	Not Available
Evaporation rate:	Not Available	Decomposition temperature:	209°C
Flammability (solid,gaseous):	Not Available	Viscosity:	a. Kinematic:Not Available b. Dynamic: Not Available
Density : Not Available	-		

SECTION 10 : Stability and reactivity

Reactivity: None under normal processing.

Chemical stability: Stable under normal conditions.

Possible hazardous reactions:

Conditions to avoid:Incompatible materials.

Incompatible materials:Strong oxidizing agents.Strong bases.

Hazardous decomposition products:

SECTION 11: Toxicological information

Acute Toxicity:				
Oral:	5329-14-6	LD50 Oral - rat - 3,160 mg/kg		
Chronic Toxicity: No additional information.				
Corrosion Irritation:				
Dermal:	5329-14-6	Skin - Human Result: Mild skin irritation		
Ocular:	5329-14-6	Eyes - rabbit Result: Moderate eye irritation		
Sensitization:		No additional information.		

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.10.2015 Page 5 of 6

Sulfamic Acid, ACS

Single Target Organ (STOT):	No additional information.
Numerical Measures:	No additional information.
Carcinogenicity:	No additional information.
Mutagenicity:	No additional information.
Reproductive Toxicity:	No additional information.

SECTION 12: Ecological information

Ecotoxicity

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - 70.3 mg/l - 96 h (OECD Test Guideline 203): 5329-14-6

Persistence and degradability: Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

SECTION 13: Disposal considerations

Waste disposal recommendations:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

UN-Number

2967

UN proper shipping name

Sulphamic acid

Transport hazard class(es)



Class:

8 Corrosive substances

Packing group: III

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 01.10.2015 Page 6 of 6

Sulfamic Acid, ACS

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16: Other information

GHS Full Text Phrases:

Abbreviations and acronyms:

 $\begin{tabular}{ll} \textbf{Effective date} : 01.10.2015 \\ \textbf{Last updated} : 03.25.2015 \\ \end{tabular}$