

Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Sulfamic Acid, ACS	
NCL Catalog Number	S-88	
Product Description	Laboratory chemical	
Manufacturer	EMD Chemicals Inc.	PO Box 70, 480 Democrat Road Gibbstown, NJ 08027
Supplier	NCL of Wisconsin, Inc.	PO Box 8, Birnamwood, WI 54414
	Telephone: 1-800-648-7836	Fax: 715-449-2454

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Skin Corrosion	Category 1C
Serious Eye Damage	Category 1
Aquatic Acute	Category 2



Signal Word Danger

Hazard Statements

H314	Causes severe skin burns and eye damage.
H401	Toxic to aquatic life.

Precautionary Statements

P260	Do not breathe dust.
P264	Wash exposed skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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/shower.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	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.
P310	Immediately call a POISON CENTER or doctor.
P405	Store locked up.
P501	Dispose of contents/container to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Formula	H ₃ NO ₃ S
Synonyms	Amidosulfonic Acid, Sulfamidic Acid

Substance

Name	CAS #	Approximate %
Sulfamic Acid	5329-14-6	100

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures	Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
If Inhaled	Remove person to fresh air and keep comfortable for breathing. Allow victim to rest. Call a POISON CENTER or doctor if you feel unwell.
In Case of Skin Contact	Remove all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor.
In Case of Eye Contact	Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
If Swallowed	Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

Most Important Symptoms/Effects Acute and Delayed

After Skin Contact	Caustic burns/corrosion of the skin.
After Eye Contact	Causes serious eye irritation.

Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical attention if exposed.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media	Foam. Dry powder. Sand. Carbon dioxide. Water spray.
Unsuitable Extinguishing Media	Do not use high pressure water stream.

Special Hazards Arising from the Chemical

Thermal decomposition generates corrosive vapors. Reacts with some metals to release highly flammable gases/vapors.

Special Protective Actions for Fire-Fighters

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions	Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources. Ventilate area.
Environmental Precautions	Prevent entry to surface and ground waters.
Methods and Materials for Containment and Cleaning Up	Clean up spill with inert absorbent material. Collect spillage. Store away from other materials. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling	Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Conditions for Safe Storage Including any Incompatibilities	Keep in a tightly closed container, stored in a cool, dry, ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No data available

Appropriate Engineering Controls

Material should be handled or transferred in a fume hood or with equivalent ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures

Eye/Face Protection

Avoid all unnecessary exposure.

Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material.

Skin Protection

Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection

Wear appropriate mask.

Other Information

Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid, crystalline powder
Color	White
Molecular Mass	97.10 g/mol
Odor	Odorless
Odor Threshold	Not determined
pH	Not determined
Melting Point/Freezing Point	205°C
Initial Boiling Point and Boiling Range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	2.1
Solubility	Soluble in water
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available
Incompatible Materials	Reducing agents, metals, acids
Hazardous Decomposition Products	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Not classified
Sulfamic Acid (5329-14-6)	
LD50 oral rat	3160 mg/kg bw/day
LD50 dermal rat	>2000 mg/kg bodyweight
Skin Corrosion/Irritation	Causes severe skin burns.
Serious Eye Damage/Irritation	Causes serious eye damage.
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	No data available
Symptoms/Injuries After Skin Contact	Caustic burns/corrosion of the skin.
Symptoms/Injuries After Eye Contact	Causes serious eye damage.
Chronic Symptoms	Not available
Other Information	Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Toxic to aquatic life.
Sulfamic Acid (5329-14-6)	
LC50 fish 1	>14.2 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	1.6 mg/l (48 h; Daphnia magna; GLP)
EC50 Other aquatic organisms 1	≥ 1000 mg/l (16h; Pseudomonas putida)
LC50 fish 2	70.3 mg/l (96 h; Pimephales promelas)
Threshold limit algae 1	48 mg/l (72 h; Desmodesmus subspicatus; GLP)
Persistence and Degradability	Not applicable
Bioaccumulative Potential	Low potential for bioaccumulation. Log Pow: 0.10 (Estimated value)
Mobility in Soil	Toxic to flora.
Other Adverse Effects	Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations	Dispose of contents/containers in accordance with local, state and federal regulations.
Other Information	Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number	2967
UN Shipping Name	Sulfamic Acid
Transport Hazard Class(es)	8
Packing Group	III
Environmental Hazards	Toxic to aquatic life.
Transport in Bulk	Not applicable
Other Precautions	Not applicable

SECTION 15: REGULATORY INFORMATION

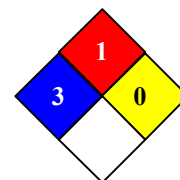
Sulfamic Acid (5329-14-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

SECTION 16: OTHER INFORMATION

Revision Date: 04/10/2015

NFPA Hazards

Health Hazard	3: Short exposure could cause serious temporary or moderate residual injury.
Fire Hazard	1: Must be preheated for ignition; flashpoint above 200°F (93°C).
Reactivity/Instability	0: Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health	3: Major injury likely unless prompt action is taken and medical treatment is given.
Flammability	1: Materials that must be preheated before ignition will occur. Includes liquids, solids and semisolids having a flashpoint above 200°F (93°C) (e.g., Canola oil).
Physical Hazard	0: Materials that are normally stable.
Personal Protection	H

S-88	
Health	3
Flammability	1
Physical Hazard	0
Personal Protection	H

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END OF SAFETY DATA SHEET