



COLUMBUS CHEMICAL INDUSTRIES INC.

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Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (as Used on Label and List)

Sulfamic Acid

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section I

Manufacturers /Distributor Address Number Street City State and Zip Code

Columbus Chemical Industries

N4335 Temkin Road

Columbus, Wisconsin 53925

Emergency Telephone Number

CHEMTREC 1 (800) 424-9300

Telephone Number for Information

1-920-623-2140

Date Prepared

04-27-2006

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Sulfamic Acid	5329-14-6	Not Available	Not Available	Not Available	

*SYNONYMS: Amidosulfamic acid; Amidosulfonic acid; Aminosulfonic acid.

Section III - Physical/Chemical Characteristics

Boiling Point	Decomposes	Specific Gravity (H ₂ O = 1) @ 20 °C/68 °F	2.15
Vapor Pressure (mm Hg)	Not Available	Melting Point Decomposes @	200 °C (399 °F)
Vapor Density (AIR = 1)	Not Available	Evaporation Rate (Butyl Acetate = 1)	Not Available

Solubility in Water

22 g / 100 g @ 20 °C (68 °F); pH of 1% aqueous solution = 1.18

Appearance and Odor

Odorless, white, crystalline solid.

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Not flammable.		Not Applicable	Not Applicable

Extinguishing Media

Water spray, chemical foam or carbon dioxide.

Special Fire Fighting Procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin or eyes. Use water spray to keep fire-exposed containers cool.

Unusual Fire and Explosion Hazards

Release of toxic gases under fire conditions. Aqueous solutions of sulfamic acid are strongly acidic.

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid	Strong oxidizing reagents, metals, silver metal, excessive heat.
	Stable	X		

Incompatibility Materials to Avoid

Chlorine, hypochlorous acid, hypochlorites, cyanides, nitric acid, sulfides, fuming nitric acid.

Hazardous Decomposition or Byproducts

Sulfur dioxide, sulfur trioxide, ammonia.

Hazardous Polymerization**Conditions to Avoid**

	May Occur		
	Will Not Occur		Not listed

Section VI Health Hazard Data

Routes of Entry	Inhalation ?	Skin ?	Ingestion ?
	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

Irritating to the skin, eyes, mucous membranes and upper respiratory tract. SENSITIZER! Can cause blindness upon eye contact. May be harmful if swallowed. Inhalation may result in inflammation and edema of the larynx and bronchi.

Repeated or prolonged inhalation of dust can produce respiratory irritation, lung damage, and chronic respiratory irritation.

Carcinogenicity	NTP	IARC Monographs	OSHA REGULATED?
	Not listed	Not listed	Not listed

Signs and Symptoms of Exposure.

Burning sensation, itchiness, redness, sneezing, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, choking, blisters, tissue destruction, bloody diarrhea, edema, bronchitis, unconsciousness, death.

Medical Conditions Generally Aggravated by Exposure

Asthma, emphysema, other respiratory diseases.

Emergency and First Aid Procedures **EYES/SKIN:** Flush immediately with plenty of water for at least 15 minutes. Remove contaminated clothing. Remove contact lenses if possible. Call physician. **INGESTION:** Do not induce vomiting. Loosen tight clothing. If not breathing, give mouth-to-mouth resuscitation. Get medical attention. **INHALATION:** Move to fresh air. Give oxygen if breathing is difficult, artificial respiration if not breathing. Seek medical attention.

Section VII Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled Evacuate unprotected personnel from area. Eliminate all ignition sources. Wear self-contained breathing apparatus rubber boots, heavy protective gloves and chemical safety goggles. Pick up and carefully place material into clean, dry container; cover and remove from area. Flush spill area with water.

Waste Disposal Method Dispose of material in accordance with all Federal, state, and local regulations.

Precautions to be Taken in Handling and Storing Do not get in eyes or on skin or clothing. Do not taste or swallow. Avoid breathing dust. Use only with adequate ventilation. Wash thoroughly after handling. Store in a cool, dry area. Keep container tightly closed. Do not store with cyanides, sulfides, chlorine, hypochlorous acid or hypochlorites.

Other Precautions Containers, even when empty, will retain residue. Always obey hazard warnings and handle empty containers as if they were full.

Section VII Control Measures

Respiratory Protection (Specify Type) NIOSH/MSHA-approved respirator with dust/mist cartridge.

Ventilation	Local Exhaust	Required.	Special	Safety shower nearby.
	Mechanical (General)	Recommended.	Other	Eyewash station nearby.

Protective Gloves Chemical-resistant rubber gloves. **Eye Protection** Chemical Safety Goggles.

Other Protective Clothing or Equipment Boots; protective clothing; full-face respirator, if needed.

Work /Hygienic Practices Do NOT wear contact lenses. Wear appropriate personal protective equipment. Wash thoroughly after handling. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Avoid prolonged or repeated exposure. SENSITIZER.

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