



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)

Silver Nitrate

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, Inc.

N4335 Temkin Road

Columbus, WI 53925

Emergency Telephone Number

CHEMTREC 1-800-424-9300

Telephone Number for Information

(920) 623-2140

Date Prepared

01-06-2004

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)
Silver Nitrate*	7761-88-8	0.01 mg/m ³ TWA	0.01 mg/m ³ TWA	Not available	>99%

*Subject to the reporting requirements of SARA Title III Section 313.

Section III - Physical/Chemical Characteristics

Boiling Point	Decomposes @	440 °C (824 °F)	Specific Gravity (H ₂ O = 1)	4.35
Vapor Pressure (mm Hg)		Not available	Melting Point	212 °C (413.6 °F)
Vapor Density (AIR = 1)		5.8	Evaporation Rate (Butyl Acetate = 1)	Not available

Solubility in Water

122 g / 100 cc water @ 0 °C (32 °F)

Appearance and Odor

Colorless to white, odorless crystals.

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Nonflammable		Not applicable	Not applicable

Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

Special Fire Fighting Procedures

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.

Unusual Fire and Explosion Hazards

Toxic gas of nitrogen oxides and silver oxides may be produced.

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid	Light, incompatibles, heat
	Stable	X		and oxygen gas.

Incompatibility Materials to Avoid

Combustible materials, bromine trifluoride and trichloride, calcium carbide, magnesium, phosphine, strong reducing agents.

Hazardous Decomposition or Byproducts

Oxides of nitrogen, silver oxides.

Hazardous Polymerization**Conditions to Avoid**

	May Occur		Not applicable.
	Will Not Occur	X	

Section VI Health Hazard Data

Routes of Entry	Inhalation ?	Skin ?	Ingestion ?
	X	X	X

Health Hazards (Acute and Chronic)

SKIN: May cause irritation and may be harmful if absorbed. EYE: Causes eye irritation. INHALATION: May be

Material is irritating to the mucous membranes and upper respiratory tract. May cause severe irritation. INGESTION:

harmful if swallowed. Toxic to lungs and mucous membranes. Acute oral toxicity: LD₅₀ (MOUSE): 50 mg/kg.

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

Signs and Symptoms of Exposure.

EYES: Reddening, tearing, irritation, blindness. SKIN: Skin rash, pain, burns, reddening, dermatitis, ulcerations.

INGESTION: Gastrointestinal pain, diarrhea, nausea, vomiting. INHALATION: Coughing, choking, shortness of breath.

Medical Conditions Generally Aggravated by Exposure

Medical conditions that may be aggravated by exposure to this product include:

Conjunctivitis of the eye, dermatitis of the skin, asthma, emphysema and other respiratory diseases.

Emergency and First Aid Procedures

INGESTION: Wash out mouth with water provided person is conscious. DO NOT INDUCE

VOMITING. Call a physician immediately. INHALATION: Remove to fresh air. If not breathing give artificial respiration.

If breathing is difficult, give oxygen. SKIN: Flush with water for at least 15 minutes. Remove contaminated clothing;

call a physician. EYES: Flush with large amounts of water for at least 15 minutes, lifting lower and upper eyelids.

Section VII Precautions for Safe Handling and Use**Steps to be Taken in Case Material is Released or Spilled**

Evacuate area. Wear NIOSH/MSHA-approved respirator, chemical-resistant goggles,

rubber boots, apron and rubber gloves. Sweep up, place in a plastic container and hold for waste disposal. Avoid raising dust. Ventilate and wash spill area when complete. Prevent release to environment.

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

Precautions to be Taken in Handling and Storing

Store in a cool, dry, well-ventilated area in tightly-closed, plainly-labelled containers. Store in a corrosion-resistant container. Protect against physical damage, air and light. Maintain adequate ventilation. Wash thoroughly after handling. Do not ingest or breathe dust. Protect exposed tissues.

Other Precautions Containers, even when empty, will retain residue and vapors. Always obey hazard warnings and handle empty containers as if they were full. Do not store near combustible materials.

Section VII Control Measures

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

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

Protective Gloves Appropriate chemical-resistant gloves. Eye Protection safety goggles

Other Protective Clothing or Equipment Lab coat or apron, boots.

Work /Hygienic Practices Contact lenses should not be worn when working with this material. Wash exposed areas thoroughly after handling. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Do not ingest or breathe dust. Wash contaminated clothing before reuse. Wash hands prior to eating or smoking.

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