



COLUMBUS CHEMICAL INDUSTRIES INC.

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Material Safety Data Sheet

U.S. Department of Labor

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

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

IDENTITY (as Used on Label and List)

Ammonium Molybdate Reagent I

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

P.O. Box 8, N4335 Temkin Rd.

Columbus, WI 53925-0008

Emergency Telephone Number

Chemtrec 1-800-424-9300

Telephone Number for Information

920-623-2140

Date Prepared

06-19-2007

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Table with 6 columns: Hazardous Components (Specific Chemical Identity, Common Name(s)), CAS #, OSHA PEL, ACGIH TLV, Other Limits Recommended, % (optional). Rows include Sulfuric Acid* and Ammonium Molybdate.

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

*EPA TSCA Section 8(B) Chemical Inventory.

*Synonyms: Dihydrogen sulfate; Oil of Vitreol; Sulphuric acid.

Section III - Physical/Chemical Characteristics

Table with 4 columns: Property, Value, Property, Value. Rows include Boiling Point, Vapor Pressure, Vapor Density, Specific Gravity, Melting Point, and Evaporation Rate.

Solubility in Water
Complete (in all proportions).

Appearance and Odor
Clear, yellow liquid.

Section IV Fire and Explosion Hazard Data

Table with 4 columns: Flash Point (Method Used), Flammable Limits, LEL, UEL. Row includes Non-flammable.

Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

Special Fire Fighting Procedures

In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions. Corrosive. May cause ignition when mixed with finely divided material.

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid	None Documented
	Stable	X		

Incompatibility Materials to Avoid

Bases, halides, organic materials, metals, carbides, cyanides, chlorates, nitrates, picrates, permanganate, peroxides.

Hazardous Decomposition or Byproducts

Oxides of sulfur (e.g. sulfur dioxide); hydrogen sulfide.

Hazardous Polymerization**Conditions to Avoid**

	May Occur		N/A
	Will Not Occur	X	

Section VI Health Hazard Data

Routes of Entry	Inhalation ?	Skin ?	Ingestion ?
Multiple-including eyes	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

Destructive to mucous membranes and upper respiratory tract, eyes and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, pulmonary edema and chemical pneumonitis. Harmful if absorbed through skin. May effect teeth and cardiovascular system.

Carcinogenicity	NTP	IARC Monographs	OSHA REGULATED?
	Not Listed	Yes (sulfuric mists only)	Not Listed

Signs and Symptoms of Exposure.

Burning sensation of skin, eyes and/or upper respiratory tract. Coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Skin burns, irritation of eyes and inflammation and/or edema of exposed tissues.

Medical Conditions Generally Aggravated by Exposure

None identified.

Emergency and First Aid Procedures **INGESTION:** Wash out mouth with water provided person is conscious. 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 Wear approved respirator, rubber boots and heavy rubber gloves. Dike to prevent entry to sewer or waterways. Ventilate area. Neutralize spill with soda ash or lime. With clean shovel 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 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 resistant area. Protect against moisture, physical damage and light. Maintain adequate ventilation. Do not ingest or breathe vapors. Protect exposed tissues. Store away from heat.

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

Section VIII Control Measures

Respiratory Protection (Specify Type) NIOSH / MSHA approved respirator

Ventilation	Local Exhaust	Recommended.	Special	Safety Shower nearby.
	Mechanical (General)	Acceptable.	Other	Full face shield.

Protective Gloves Compatible resistant gloves. **Eye Protection** Chemical safety goggles.

Other Protective Clothing or Equipment Rubber apron, boots. Full rubber acid suit. Eye wash station nearby.

Work /Hygienic Practices Normal: wash thoroughly after handling. Minimize vapor and mist levels. Avoid contact with skin and eyes. Do not breathe vapor. Avoid prolonged or repeated exposure.

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