



COLUMBUS CHEMICAL INDUSTRIES INC.

P.O. BOX 8
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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)

Magnesium Sulfate

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 Rd

Columbus, WI 53925-0008

Emergency Telephone Number

CHEMTREC 1-800-424-9300

Telephone Number for Information

920-623-2140

Date Prepared

12-15-2004

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). Row 1: Magnesium Sulfate, 10034-99-8, Not established, Not established, Not available, >95%

Section III - Physical/Chemical Characteristics

Table with 4 columns: Property, Value, Property, Value. Rows: Boiling Point (Not Available), Specific Gravity (H2O = 1) (Not applicable); Vapor Pressure (mm Hg) (Not applicable), Melting Point (Decomposes); Vapor Density (AIR = 1) (Not applicable), Evaporation Rate (Butyl Acetate = 1) (Not applicable)

Solubility in Water

soluble

Appearance and Odor

White, crystalline solid.

Section IV Fire and Explosion Hazard Data

Table with 4 columns: Flash Point (Method Used), Flammable Limits, LEL, UEL. Row 1: Nonflammable, Not applicable, Not applicable, Not applicable

Extinguishing Media

Use water spray, dry chemical, or carbon dioxide to extinguish supporting 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.

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid	Incompatibles
	Stable	X		

Incompatibility Materials to Avoid
oxidizers

Hazardous Decomposition or Byproducts

Sulfur oxides

Hazardous Polymerization

Conditions to Avoid

	May Occur		Not available.
	Will Not Occur	X	

Section VI Health Hazard Data

Routes of Entry

Inhalation ?

Skin ?

Ingestion ?

	Yes		Yes
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Health Hazards (Acute and Chronic)

SKIN: May cause irritation and may be harmful if absorbed through the skin. EYE: Causes eye irritation.

INHALATION: May be harmful if inhaled. Material may be irritating to the mucous membranes and upper respiratory tract. INGESTION: May be harmful if swallowed.

Carcinogenicity

NTP

IARC Monographs

OSHA REGULATED?

	Not listed		Not listed
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Signs and Symptoms of Exposure.

Irritation to eyes, skin, mucous membranes and upper respiratory tract characterized by itching, swelling, redness and pain. Gastrointestinal discomfort and possible pain upon ingestion.

Medical Conditions Generally Aggravated by Exposure

Unknown to CCI.

Emergency and First Aid Procedures EYES /SKIN: Immediately flush with large amounts of water for at least 15 minutes.

Remove contaminated clothing. Assure adequate flushing of eyes by separating eyelids with fingers. INHALATION: remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. INGESTION:

DO NOT induce vomiting. Give large amounts of water. GENERAL: Wash contaminated clothing.

Section VII Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Evacuate unprotected personnel from area. Wear rubber boots, heavy protective gloves and chemical safety goggles. Sweep up, place in a plastic bag and hold for waste disposal. Large spills may be caustic. Ventilate area and wash spill site after material pickup is complete.

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 corrosion-resistant container. Protect against moisture, physical damage 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 breathe dust.

Section VII Control Measures

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

Ventilation	Local Exhaust	Recommended.	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, dust-mask.

Work /Hygienic Practices Do NOT wear contact lenses when handling material. Wear appropriate personal protective

Wash thoroughly after handling. Do not breath vapors. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash contaminated clothing before reuse.

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