

CAS No. 1309-48-4

MATERIAL SAFETY DATA SHEET

Product/Material Magnesium Oxide
Manufacturer/Distributor Whittaker, Clark & Daniels, Inc.
Address 1000 Coolidge Street
 South Plainfield, NJ 07080
Emergency Telephone No. (201) 561-6100

Section I - Product Identification

Trade Name Magnesium Oxide
Synonym
Chemical Family
Formula MgO
CAS Number 1309-48-4
HMIS Health 1
 Flammability 1
 Reactivity 1

Section II - Hazardous Ingredients

None.

Section III - Physical Data

Boiling Point (°F) Solid
Vapor Pressure (mmHg) Solid
Vapor Density Solid
Solubility in Water Slight
Specific Gravity Solid
Percent Volatile by Weight 0
Evaporation Rate 0
Appearance and Odor White powder, odorless

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Section IV - Fire and Explosion Hazard Data

Flash Point	Non-flammable
Flammable Limits	LEL - Non-flammable UEL - Non-flammable
Extinguishing Media	Any
Special Fire Fighting Procedures	None
Unusual Fire and Explosion Hazards	None

Section V - Health Hazard Data

Threshold Limit Values	15 mg/M3 (OSHA) 10 mg/M3 (ACGIH)
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Effects of Overexposure

A. Acute

1. Ingestion - Generally, magnesium oxide is so slowly absorbed that oral administration causes nothing more than purging. If evacuation fails to occur irritation of the mucous membranes and absorption can occur. Systemically, it can produce dizziness, diarrhea, nausea, vomiting, depression and depression of the muscular contraction and respiratory paralysis.
2. Inhalation - Inhalation of magnesium oxide can produce respiratory irritation with resulting edema and difficulty in breathing. If magnesium oxide is heated to the point of volatilization, magnesium oxide fumes may be generated. Exposure to magnesium oxide fume can produce metal fume fever, an illness similar to influenza. The symptoms of this illness include fever, cough oppression in the chest, nausea, vomiting, headache, muscular pain and leukocytosis. Inhalation of magnesium oxide dust and fume may aggravate symptoms for persons suffering from chronic respiratory diseases.
3. Dermal Exposure
 - a. Toxic - No applicable information was found concerning the acute dermal toxicity of the product.
 - b. Irritation - Not a skin irritant.
 - c. Sensitization - No applicable information found.
4. Eye Irritation - Testing on the product has shown that it is only slightly irritating to the eyes. When instilled in rabbit eyes, the product immediately produced a slight conjunctival injection, a very slight chemosis and clear colorless discharge. At 24 hrs. there was also a cloudiness of the cornea and anesthesia. Anesthesia disappeared after 48 hrs. The ocular effects disappeared in three of four eyes by the sixth day and in the remaining eye after twelve days.

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B. Subchronic, Chronic, Other

No applicable information was found concerning adverse health effects resulting from subchronic and chronic exposure to the product.

C. Emergency and First-Aid Procedures

1. *Eye* - In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
2. *Skin* - Not Applicable.
3. *Ingestion* - Not Applicable.
4. *Inhalation* - If magnesium oxide fume or large amounts of magnesium oxide dust are inhaled, remove to fresh air.

C. Carcinogenicity - Not listed with NTP, IARC, or OSHA as a known or suspected carcinogen.

Section VI - Reactivity Data

Product is stable

Incompatibility

Strong oxidizers, Chlorine trifluoride. If magnesium oxide is heated to the point of volatilization, magnesium oxide fume may be generated.

Section VII - Spill or Leak Procedures

Steps to take in case material is released or spilled

Normal clean-up procedures. Care should be taken to avoid causing dust to become airborne. Vacuum cleaning systems are recommended. Do not flush to sewer.

Waste Disposal Method

Disposal must be made in accordance with federal, state and local regulations.

Section VIII - Special Protection Information

Eye Protection (use most appropriate)

Safety glasses, goggles, face shield

Skin Protection

Leather or rubber gloves

Respiratory Protection

Use of dust respirator is recommended when exposure limits may be exceeded.

Ventilation

Local exhaust ventilation to collector or containment recommended to control dust to below exposure limits.

