

MSDS Sheet - Magnesium Oxide

Monday, May 21, 2012
9:59 AM

Material Safety Data Sheet
Magnesium Oxide
ACC# 13450

Section 1 - Chemical Product and Company Identification

MSDS Name: Magnesium Oxide

Catalog Numbers: S80066, M300 500, M300-500, M300500, M3494 500, M3494-500, M3494500, M51 100, M51 500, M51-100, M51-500, M51100, M51500, M68 3, M68-3, M683, NC9534192, XXM6850KG

Synonyms: Magnesia, Calcined Magnesium, Calcined Brucite

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

| CAS# | Chemical Name | Percent | EINECS/ELINCS |
|-----------|-----------------|---------|---------------|
| 1309-48-4 | Magnesium oxide | 100 | 215-171-9 |

Hazard Symbols: None listed.

Risk Phrases: None listed.

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white. **Caution!** May cause eye and skin irritation. Inhalation of fumes may cause metal-fume fever. May cause respiratory tract irritation.

Target Organs: Respiratory system, eyes, mucous membranes.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid if irritation develops or persists. Rinse area with large amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Antidote: The use of Calcium gluconate to precipitate the oxalate should be determined by only qualified medical personnel.

Section 5 - Fire Fighting Measures

General Information: Substance is noncombustible.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage: Store in a cool, dry place.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Good general ventilation should be sufficient to control airborne levels.

Exposure Limits

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|-----------------|-----------------|--|------------------------------------|
| Magnesium oxide | 10 mg/m3 TWA | no established RELs - see Appendix D 750 mg/m3 IDLH | total particulate: 15 mg/m3 TWA |

OSHA Vacated PELs: Magnesium oxide: total particulate: 10 mg/m3 TWA

Personal Protective Equipment

Eyes: Wear chemical goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: white
Odor: odorless
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 3582 deg C
Freezing/Melting Point: 2800 deg C
Autoignition Temperature: Not available.
Flash Point: Not available.
Decomposition Temperature: Not available.
NFPA Rating: (estimated) Health: 1; Flammability: 0; Reactivity: 0
Explosion Limits, Lower: Not available.
Upper: Not available.
Solubility: Slightly soluble in water
Specific Gravity/Density: 3.58
Molecular Formula: MgO
Molecular Weight: 40.3044

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials: Reacts violently with interhalogens such as chlorine trifluoride (ClF₃) or bromine pentafluoride (BrF₃). Reacts incandescantly with phosphorus pentachloride (PCl₅). Reacts exothermically with water to form magnesium hydroxide.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 1309-48-4: OM3850000

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 1309-48-4: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Neurotoxicity: No data available.

Mutagenicity: No data available.

Other Studies: No data available.

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

| | US DOT | IATA | RID/ADR | IMO | Canada TDG |
|-----------------------|---------------------------|------|---------|-----|---------------------------|
| Shipping Name: | No information available. | | | | No information available. |
| Hazard Class: | | | | | |
| UN Number: | | | | | |
| Packing Group: | | | | | |

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 1309-48-4 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 1309-48-4 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

Not available.

Risk Phrases:**Safety Phrases:****WGK (Water Danger/Protection)**

CAS# 1309-48-4: 1

Canada

CAS# 1309-48-4 is listed on Canada's DSL List. CAS# 1309-48-4 is listed on Canada's DSL List.

This product has a WHMIS classification of Not controlled..

CAS# 1309-48-4 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 1309-48-4: OEL-ARAB Republic of Egypt: TWA 10 mg/m³ OEL-AUSTRALIA: TWA 10 mg/m³ JANUARY 1993 OEL-BELGIUM: TWA 10 mg/m³ JANUARY 1993 OEL-DENMARK: TWA 6 mg/m³ OEL-FRANCE: TWA 10 mg/m³ JANUARY 1993 OEL-GERMANY: TWA 6 mg/m³ OEL-GERMANY: TWA 6 mg/m³ JANUARY 1993 OEL-HUNGARY: TWA 5 mg/m³; STEL 10 mg/m³ OEL-THE NETHERLANDS: TWA 10 mg/m³ JANUARY 1993 OEL-THE PHILIPPINES: TWA 15 mg/m³ JANUARY 1993 OEL-POLAND: TWA 15 mg/m³ OEL-RUSSIA: STEL 5 mg/m³ OEL-SWITZERLAND: TWA 6 mg/m³ OEL-SWITZERLAND: TWA 6 mg/m³; STEL 12 mg/m³ JANUARY 1993 OEL-TURKEY: TWA 15 mg/m³ OEL-UNITED KINGDOM: TWA 10 mg/m³ JANUARY 1993 OEL-UNITED KINGDOM: TWA 10 mg/m³ (total dust) OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 12/12/1997

Revision #3 Date: 8/02/2001

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

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