



# STAR GRACE MINING CO.,LIMITED

ADD: 29-67, NO.929, XINAN ROAD, SHAHEKOU DISTRICT, DALIAN, LIAONING, CHINA  
E-mail: maggiawang@magnesium-fertilizer.com Web: www.magnesium-fertilizer.com  
Tel :+86 138 8960 2860 Fax: +86 0411 8472 1630

## Material Safety Data Sheet

### Magnesium Oxide MSDS

ACC# 13450

#### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Magnesium Oxide, Caustic calcined magnesite ,

**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:** Caustic calcined magnesite, Magnesium Oxide, 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,



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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



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**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



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**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 (ClF<sub>3</sub>) or bromine pentafluoride (BrF<sub>3</sub>). Reacts incandescently with phosphorus pentachloride (PCl<sub>5</sub>). 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



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	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	No information available.				No information available.
<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					
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 depletors. This material does not contain any Class 2 Ozone depletors.

### 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



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## 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/m<sup>3</sup> OEL-AUSTRALIA:TWA 10 mg/m<sup>3</sup> JANUARY 1993 OEL-BELGIUM:TWA 10 mg/m<sup>3</sup> JANUARY 1993 OEL-DENMARK:TWA 6 mg/m<sup>3</sup> OEL-FRANCE:TWA 10 mg/m<sup>3</sup> JANUARY 1993 OEL-GERMANY:TWA 6 mg/m<sup>3</sup> OEL-GERMANY:TWA 6 mg/m<sup>3</sup> JANUARY 1993 OEL-HUNGARY:TWA 5 mg/m<sup>3</sup>;STEL 10 mg/m<sup>3</sup> OEL-THE NETHERLANDS:TWA 10 mg/m<sup>3</sup> JANUARY 1993 OEL-THE PHILIPPINES:TWA 15 mg/m<sup>3</sup> JANUARY 1993 OEL-POLAND:TWA 15 mg/m<sup>3</sup> OEL-RUSSIA:STEL 5 mg/m<sup>3</sup> OEL-SWITZERLAND:TWA 6 mg/m<sup>3</sup> OEL-SWITZERLAND:TWA 6 mg/m<sup>3</sup>;STEL 12 mg/m<sup>3</sup> JANUARY 1993 OEL-TURKEY:TWA 15 mg/m<sup>3</sup> OEL-UNITED KINGDOM:TWA 10 mg/m<sup>3</sup> JANUARY 1993 OEL-UNITED KINGDOM:TWA 10 mg/m<sup>3</sup> (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: 08/02/2019

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.

For and on behalf of  
STAR GRACE MINING CO., LIMITED

*Menzhi chao*  
.....  
Authorized Signature(s)