Milled MagChem 10 Magnesium Oxide

Safety Data Sheet

According to SafeWork Australia

Date of issue: 4/18/2014 Revision date: 08/03/2021 Replaces:10/11/2016 Version 1.1

SECTION 1: Identification of Product and Company

Trade name : MagChem 10 CR
MagChem 10 -20
MagChem 10 -200
MagChem 10 -325
MagChem 10 -325S
MagChem 10 -325LF
MagChem 10 CR Leather

Chemical name : Magnesium oxide

Synonyms : calcined brucite magnesia, calcined magnesia, calcined magnesite, magnesite burnt deadburned / refractory, periclase, sea-water magnesia, oxomagnesia

CAS No : 1309-48-4

Formula : MgO

Martin Marietta Magnesia Specialties
1800 Eastlake Road
Manistee, Michigan 49660, USA
Tel: +001 410 780 5500

Emergency number : CHEMTREC, U.S.: 1-800-424-9300 INTERNATIONAL: +1-703-527-3887 Available 24/7
CHEMTREC Australia (Sydney) +(61)-290372994 English

SECTION 2: Hazards identification

2.1. Most important hazards and effects

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use. Do not breathe dust.

Symptoms/injuries after inhalation : Inhalation may cause: irritation, coughing, shortness of breath.

Symptoms/injuries after skin contact : Effects of skin contact may include: skin irritation.

Symptoms/injuries after eye contact : May cause eye irritation.

Symptoms/injuries after ingestion : Ingestion generally causes purging of the bowels. Swallowing large amounts may cause bowel obstruction.

Adverse physicochemical, human health and environmental effects : No adverse health or environmental effects are expected to occur as a result of normal conditions of use.

2.2. Hazard classification of the substance or mixture and the classification system used

Acute Tox. 5 (Oral) H303

2.3. Appropriate elements of labeling

Signal word (GHS-BR) : Warning

Hazard statements (GHS-BR) : H303 - May be harmful if swallowed

Precautionary statements (GHS-BR) : P312 - Call a doctor if you feel unwell

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type : Mono-constituent

Name : Milled MagChem 10 Magnesium Oxide

CAS No : 1309-48-4

EC no : 215-171-9

Name	Product identifier	%	Classification according to SafeWork Australia
Magnesium oxide	(CAS No) 1309-48-4	98	Acute Tox. 5 (Oral) H303
Oxides of silicon, iron, aluminum, and calcium	(CAS No) mixture	2	Not classified

3.2. Mixture

Not applicable

SECTION 4: First aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Treatment : No additional medical information found.If you feel unwell, seek medical advice

SECTION 5: Firefighting measures

5.1. Extinguishing means

Suitable extinguishing media : Not combustible. If there is a fire nearby, use suitable extinguishing agents. Water fog. Carbon dioxide. Dry powder. Foam.

Unsuitable extinguishing media : None known.

5.2. Specific hazards relating to measures

Fire hazard : If heated to decomposition, magnesium oxide fumes may be generated.

Explosion hazard : Product is not explosive.

Reactivity : Reacts with : Incompatible materials.

5.3. Special methods for fire fighting

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : No additional risk management measures required.

SECTION 6: Accidental release measures

6.1. Personal precautions in case of spillage or leakage

General measures : Avoid creating or spreading dust. Dust deposited may be vacuum cleaned.

6.1.1. For non-emergency personnel

Protective equipment : Where excessive dust may result, use approved respiratory protection equipment.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Where excessive dust may result, use approved respiratory protection equipment.

Emergency procedures : Ventilate area. If a major spill occurs, all personnel should be immediately evacuated and the area ventilated.

6.2. Precautions for the environment

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Cleaning Methods

For containment : Do not allow minor leaks or spills to accumulate on walking surfaces. Contain and collect as any solid.

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust.

SECTION 7: Handling and storage

7.1. Handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of dust.

Hygiene measures : Smoking, eating and drinking should be prohibited in areas of storage and use. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

7.2. Storage

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Incompatible materials. Keep container closed when not in use.

Incompatible materials : ACID (Strong) - vigorous reaction, heat generated; Chlorine Trifluoride reacts violently, producing flame; Phosphorous Pentachloride - incandesces brilliantly. NOTE: Exposure to water may cause this product to slowly hydrate, during which heat may be generated (exothermic reaction).

Prohibitions on mixed storage : Keep away from incompatible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation to minimize exposure to dust. Use engineering controls to eliminate or reduce exposures below exposure limits.

8.3. Personal Protective Equipment

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Use air-purifying respirator equipped with particulate filtering cartridges.

SECTION 9: Physical and chemical properties

9.1. Physical and Chemical Properties

Physical state	:	Solid
Appearance	:	Powder.
Molecular mass	:	40.3 g/mol
Colour	:	white.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
pH solution	:	10.3 saturated aqueous solution
Melting point	:	2827 (2797 - 2857) °C
Freezing point	:	No data available
Boiling point	:	3600 °C
Flash point	:	Product does not sustain combustion
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Explosive limits	:	No data available
Vapour pressure	:	No data available
Vapour pressure at 50 °C	:	0 hPa
Relative vapour density at 20 °C	:	0
Relative density	:	No data available
Density	:	3.58 g/cm³
Solubility	:	In water, material is partially soluble.
Log Pow	:	No data available
Log Kow	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	> 1700 °C
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Product is not explosive.
Oxidising properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Chemical stability	:	Stable at ambient temperature and under normal conditions of use.
Reactivity	:	Reacts with : Incompatible materials.
Possibility of hazardous reactions	:	Hazardous polymerization will not occur.
Conditions to avoid	:	Avoid contact with incompatible materials, excessive heat or cold. Moisture.
Incompatible materials	:	ACID (Strong) - vigorous reaction, heat generated; Chlorine Trifluoride reacts violently, producing flame; Phosphorous Pentachloride - incandesces brilliantly. NOTE: Exposure to water may cause this product to slowly hydrate, during which heat may be generated (exothermic reaction).
Hazardous decomposition products	:	If magnesium oxide is heated to the point of volatilization (i.e., >1700 C), magnesium oxide fumes may be generated.

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : May be harmful if swallowed.

Magnesium oxide (1309-48-4)	
LD50 oral rat	3870 - 3990 mg/kg
ATE CLP (oral)	3870.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Magnesium oxide (1309-48-4)	
LC50 fishes 1	1355 mg/l
EC50 Daphnia 1	190 mg/l

12.2. Persistence and degradability

Milled MagChem 10 Magnesium Oxide (1309-48-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Milled MagChem 10 Magnesium Oxide (1309-48-4)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods : Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. Dispose in a safe manner in accordance with local/national regulations.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1 National and International Regulations

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

14.2 For products classified as dangerous for transportation

Not considered a dangerous good for transport regulations

Other information : No supplementary information available.

SECTION 15: Regulations

Magnesium Oxide (1309-48-4)
Listed on the AICS (Australian Inventory of Chemical Substances)

SECTION 16: Other information

Revision date : 10/11/2016
Other information : None.

Data sources	:	Australia Worksafe “Preparation of Safety Data Sheets for Hazardous Chemicals.” Chemical Inspection & Regulation Service; accessed at: http://www.cirs-reach.com/Inventory/Global_Chemical_Inventories.html. Ind. Exposure & Control Techn. for OSHA Regulated Substances - MgO (fume), March, 1989, pp. 1181-1184. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
Abbreviations and acronyms	:	ACGIH (American Conference of Governement Industrial Hygienists). ATE: Acute Toxicity Estimate. CAS (Chemical Abstracts Service) number. EC50: Environmental Concentration associated with a response by 50% of the test population. GHS: Globally Harmonized System (of Classification and Labeling of Chemicals.) LD50: Lethal Dose for 50% of the test population. OSHA: Occupational Safety & Health Administration. TSCA: Toxic Substances Control Act. TWA: Time Weight Average.

SDS Prepared by: The Redstone Group, LLC
6397 Emerald Pkwy.
Suite 200
Dublin, OH 43016
T 614-923-7472
www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product