

SAFETY DATA SHEET

MAGNESIUM OXIDE >=85-100%

REVISION 7, DATE 27 MAR 2023

1. IDENTIFICATION

Product Name	Magnesium Oxide >=85-100%
Other Names	No Data Available
Uses	Agricultural, chemical and pharmaceutical chemical.
Chemical Family	No Data Available
Chemical Formula	MgO
Chemical Name	Magnesium oxide
Product Description	No Data Available

Contact Details of the Supplier of this Safety Data Sheet

Organisation	Location	Telephone
Jiangsu Khonor Chemicals Co., Limited	Rm 1902 Easey Comm Bldg, 253-261, Hennessy RD Wanchai HK	+86 19851820538

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Jiangsu Khonor Chemicals Co., Limited	Rm 1902 Easey Comm Bldg, 253-261, Hennessy RD Wanchai HK	+86 19851820538

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Not Scheduled



Globally Harmonised System

Hazard Classification	NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Signal Word	None

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
---------------------------------------	---

Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification	NOT hazardous according to the criteria of Safe Work Australia under Model WHS Regulations
------------------------------	--

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Magnesium oxide	MgO	1309-48-4	>=85 - 100 %
Ingredients determined not to be hazardous	Unspecified	Unspecified	Balance %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention. *Emergency safety eye wash facilities should be available immediately*
Skin	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention. *Emergency safety shower facilities should be available immediately*
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention.
Advice to Doctor	Treat symptomatically. *Most important symptoms and effects, both acute and delayed: Irritant to upper respiratory tract. Inhalation can cause a flu-like illness (metal fume fever). This 24- to 48- hour illness is characterized by chills, fever, aching muscles, dryness in the mouth and throat, and headache. *Most important symptoms and effects, both acute and delayed: No information available. *Indication of any immediate medical attention and special treatment needed: No information available.
Medical Conditions Aggravated by Exposure	No information available.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Dike fire-control water for later disposal.
Flammability Conditions	Non-flammable.
Extinguishing Media	Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. DO NOT USE: High pressure water jet - this will spread the fire.
Fire and Explosion Hazard	No information available.
Hazardous Products of Combustion	Combustion may product harmful gases or vapours, including magnesium oxides.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water - Runoff may cause pollution.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Carefully shovel or sweep up spilled material and place in suitable container.
Containment	Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas.
Decontamination	Clean contaminated objects and areas thoroughly observing environmental regulations.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Personal Precautionary Measures	Use personal protective equipment as required (see SECTION 8).

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8).
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Avoid exposure to air and moisture. Keep away from heat and sources of ignition - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10).
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product. For Magnesium oxide (fume): - Safe Work Australia Exposure Standard: TWA = 10 mg/m3. - New Zealand Workplace Exposure Standard [Next review 2023]: TWA = 10 mg/m3.
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Dust mask/particulate respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Chemical safety goggles. - Hand protection: Handle with gloves. Recommended: Impervious gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes.
Special Hazards Precautions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off contaminated clothing and wash it before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Powder or granules
Odour	Odourless
Colour	White or beige/brown
pH	10.3 (saturated aqueous solution)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	3,600 °C
Melting Point	2,500 - 2,800 °C
Freezing Point	No Data Available
Solubility	Practically insoluble in water; Insoluble in alcohol - Soluble in diluted acids
Specific Gravity	1.4 - 1.5
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available

Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration and size can result in an explosive mixture in air. Risk of dust-air explosion is increased if flammable vapours are also present.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Non-combustible.
Reactions That Release Gases or Vapours	May emit toxic fumes under fire conditions.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Hygroscopic.
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid generating dust. Avoid moisture and air exposure.
Materials to Avoid	Incompatible/reactive with strong acids, strong oxidising agents, interhalogens.
Hazardous Decomposition Products	May emit toxic fumes under fire conditions.
Hazardous Polymerisation	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	Information on toxicological effects: - Acute toxicity: No known effect. - Skin corrosion/irritation: No known effect. - Eye damage/irritation: No known effect. - Respiratory/skin sensitisation: No information available. - Germ cell mutagenicity: No information available. - Carcinogenicity: No information available. - Reproductive toxicity: No information available. - STOT (single exposure): No information available. - STOT (repeated exposure): No information available. - Aspiration toxicity: No information available. Information on likely routes of exposure: - Ingestion: May cause gastrointestinal discomfort if consumed in large amounts. - Eye contact: Dust contact with the eyes can lead to mechanical irritation. - Skin contact: May cause skin irritation. - Inhalation: May cause respiratory irritation or discomfort. Chronic effects: No information available.
----------------------------	--

Acute

Ingestion	Acute toxicity (Oral): COMPONENT: Magnesium oxide: - LD50: 3,870 mg/kg (male) & 3,990 mg/kg (female) [Supplier's SDS].
Inhalation	Acute toxicity (Inhalation): COMPONENT: Magnesium oxide: - LC50: >3.88 mg/L [Supplier's SDS].
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	No information available.
Persistence/Degradability	Not relevant for inorganic salts.
Mobility	No information available.
Environmental Fate	Prevent entry into drains and waterways.
Bioaccumulation Potential	Not expected to bioaccumulate.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	Dispose of contents/container in accordance with local/regional/national regulations.
Special Precautions for Land Fill	No information available.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code	
Proper Shipping Name	Magnesium oxide
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (Malaysia)

ADR Code	
Proper Shipping Name	Magnesium oxide
Class	No Data Available
Subsidiary Risk(s)	No Data Available

	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (New Zealand)

NZS5433

Proper Shipping Name	Magnesium oxide
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

Proper Shipping Name	Magnesium oxide
Class	No Data Available
Subsidiary Risk(s)	No Data Available
	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

IMDG Code

Proper Shipping Name	Magnesium oxide
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

Proper Shipping Name	MAGNESIUM OXIDE
Class	No Data Available

Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
---------------------------------------	---

15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	Not Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	Not Hazardous
----------------------	---------------

National/Regional Inventories

Australia (AIC)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	Not Determined
Europe (REACH)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	Listed
Malaysia (List of Classified Substances)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Listed
Taiwan (TCSI)	Listed
USA (TSCA)	Listed
Mexico (INSQ)	Not Determined

16. OTHER INFORMATION

Related Product Codes

MAGOXB1000, MAGOXB6000, MAGOXB6100, MAGOXB6200, MAGOXI0002, MAGOXI0003, MAGOXI0004, MAGOXI0005, MAGOXI0085, MAGOXI0086, MAGOXI0090, MAGOXI0091, MAGOXI0095, MAGOXI0097, MAGOXI0100, MAGOXI0101, MAGOXI0102, MAGOXI0106, MAGOXI0150, MAGOXI0170, MAGOXI0200, MAGOXI0201, MAGOXI0202, MAGOXI0300, MAGOXI0301, MAGOXI0302, MAGOXI0303, MAGOXI0304, MAGOXI0400, MAGOXI0499, MAGOXI0500, MAGOXI0501, MAGOXI0502, MAGOXI0503, MAGOXI0600, MAGOXI0601, MAGOXI0671, MAGOXI0672, MAGOXI0675, MAGOXI0676, MAGOXI0700, MAGOXI0701, MAGOXI0702, MAGOXI0800, MAGOXI0900, MAGOXI0901, MAGOXI1000, MAGOXI1001, MAGOXI1002, MAGOXI1003, MAGOXI1004, MAGOXI1005, MAGOXI1006, MAGOXI1007, MAGOXI1008, MAGOXI1009, MAGOXI1010, MAGOXI1011, MAGOXI1012, MAGOXI1013, MAGOXI1014, MAGOXI1015, MAGOXI1016, MAGOXI1017, MAGOXI1018, MAGOXI1019, MAGOXI1020, MAGOXI1021, MAGOXI1022, MAGOXI1023, MAGOXI1024, MAGOXI1025, MAGOXI1026, MAGOXI1027, MAGOXI1028, MAGOXI1029, MAGOXI1030, MAGOXI1031, MAGOXI1032, MAGOXI1033, MAGOXI1034, MAGOXI1035, MAGOXI1038, MAGOXI1045, MAGOXI1050, MAGOXI1051, MAGOXI1100, MAGOXI1101, MAGOXI1102, MAGOXI1103, MAGOXI1105, MAGOXI1108, MAGOXI1133, MAGOXI1180, MAGOXI1199, MAGOXI1200, MAGOXI1201, MAGOXI1215, MAGOXI1300, MAGOXI1301, MAGOXI1302, MAGOXI1310, MAGOXI1311, MAGOXI1315, MAGOXI1316, MAGOXI1317, MAGOXI1318, MAGOXI1319, MAGOXI1320, MAGOXI1350, MAGOXI1353, MAGOXI1360, MAGOXI1391, MAGOXI1392, MAGOXI1400, MAGOXI1401, MAGOXI1402, MAGOXI1500, MAGOXI1501, MAGOXI1600, MAGOXI1601, MAGOXI1602, MAGOXI1603, MAGOXI1604, MAGOXI1700, MAGOXI1701, MAGOXI1702, MAGOXI1703, MAGOXI1800, MAGOXI1801, MAGOXI1802, MAGOXI1803, MAGOXI1804, MAGOXI1805, MAGOXI1806, MAGOXI1807, MAGOXI1808, MAGOXI1809, MAGOXI1810, MAGOXI1900, MAGOXI1901, MAGOXI2000, MAGOXI2100, MAGOXI2160, MAGOXI2200, MAGOXI2300, MAGOXI2400, MAGOXI2500, MAGOXI2700, MAGOXI2701, MAGOXI2800, MAGOXI2801, MAGOXI2802, MAGOXI2805, MAGOXI2808, MAGOXI2900, MAGOXI2901, MAGOXI2902, MAGOXI3001, MAGOXI3002, MAGOXI3003, MAGOXI3010, MAGOXI3020, MAGOXI3100, MAGOXI3110, MAGOXI3200, MAGOXI3300, MAGOXI3301, MAGOXI3302, MAGOXI3400, MAGOXI3401, MAGOXI3402, MAGOXI3500, MAGOXI3501, MAGOXI3502, MAGOXI3600, MAGOXI3700, MAGOXI3701, MAGOXI3800, MAGOXI3801, MAGOXI3900, MAGOXI3901, MAGOXI4000, MAGOXI4001, MAGOXI4002, MAGOXI4100, MAGOXI4101, MAGOXI4200, MAGOXI4500, MAGOXI4501, MAGOXI4600, MAGOXI4601, MAGOXI4700, MAGOXI4701, MAGOXI4702, MAGOXI4703, MAGOXI4708, MAGOXI4709, MAGOXI4800, MAGOXI4801, MAGOXI4900, MAGOXI4901, MAGOXI5000, MAGOXI5001, MAGOXI5002, MAGOXI5100, MAGOXI5101, MAGOXI5200, MAGOXI5201, MAGOXI5300, MAGOXI5301, MAGOXI5510, MAGOXI5511, MAGOXI5512, MAGOXI5513, MAGOXI5515, MAGOXI5520, MAGOXI5521, MAGOXI5522, MAGOXI5523, MAGOXI5525, MAGOXI5526, MAGOXI5527, MAGOXI5528, MAGOXI5529, MAGOXI5530, MAGOXI5700, MAGOXI5750, MAGOXI5751, MAGOXI5800, MAGOXI5801, MAGOXI5802, MAGOXI5900, MAGOXI5901, MAGOXI6000, MAGOXI6001, MAGOXI6002, MAGOXI6003, MAGOXI6004, MAGOXI6005, MAGOXI6006, MAGOXI6007, MAGOXI6100, MAGOXI6101, MAGOXI6102, MAGOXI6103, MAGOXI6105, MAGOXI6200, MAGOXI6201, MAGOXI6202, MAGOXI6203, MAGOXI6262, MAGOXI6300, MAGOXI6301, MAGOXI6303, MAGOXI6400, MAGOXI6401, MAGOXI6402, MAGOXI6403, MAGOXI6404, MAGOXI6405, MAGOXI6406, MAGOXI6407, MAGOXI6408, MAGOXI6409, MAGOXI6410, MAGOXI6411, MAGOXI6414, MAGOXI6444, MAGOXI6445, MAGOXI6500, MAGOXI6501, MAGOXI6502, MAGOXI6503, MAGOXI6504, MAGOXI6505, MAGOXI6506, MAGOXI6507, MAGOXI6508, MAGOXI6509, MAGOXI6510, MAGOXI6520, MAGOXI6587, MAGOXI6588, MAGOXI6589, MAGOXI6590, MAGOXI6600, MAGOXI6601, MAGOXI6602, MAGOXI6603, MAGOXI6700, MAGOXI6701, MAGOXI6800, MAGOXI6801, MAGOXI6802, MAGOXI6900, MAGOXI7000, MAGOXI7001, MAGOXI7002, MAGOXI7003, MAGOXI7004, MAGOXI7100, MAGOXI7101, MAGOXI7200, MAGOXI7300, MAGOXI7400, MAGOXI7500, MAGOXI7600, MAGOXI7601, MAGOXI7700, MAGOXI7701, MAGOXI7800, MAGOXI7801, MAGOXI7900, MAGOXI7901, MAGOXI8000, MAGOXI8001, MAGOXI8002, MAGOXI8003, MAGOXI8004, MAGOXI8100, MAGOXI8200, MAGOXI8300, MAGOXI8400, MAGOXI8401, MAGOXI8500, MAGOXI8600, MAGOXI8700, MAGOXI8701, MAGOXI8800, MAGOXI8900, MAGOXI9000, MAGOXI9001, MAGOXI9002, MAGOXI9003, MAGOXI9100, MAGOXI9200, MAGOXI9201, MAGOXI9202, MAGOXI9300, MAGOXI9310, MAGOXI9400, MAGOXI9401, MAGOXI9500, MAGOXI9501, MAGOXI9600, MAGOXI9601, MAGOXI9700, MAGOXI9701, MAGOXI9800, MAGOXI9810, MAGOXI9811, MAGOXI9900, MAGOXI9901, MAGOXI1000, MAGOXM1000, MAGOXP0600, MAGOXP1000, MAGOXP1500, MAGOXP2000, MAGOXP3000, MAGOXP4200, MAGOXP5000, MAGOXP5100, MAGOXP5200, MAGOXP5250, MAGOXP5300, MAGOXP9000, MAGOXP9800, MAGOXP9801

Revision

7

Revision Date

27 Mar 2023

Key/Legend

< Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances**atm** Atmosphere**CAS** Chemical Abstracts Service (Registry Number)**cm²** Square Centimetres**CO₂** Carbon Dioxide**COD** Chemical Oxygen Demand**deg C (°C)** Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Fahrenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluble in each other.

inHg Inch of Mercury

inH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

lb Pound

LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

ltr or L Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight