

Safety Data Sheet

Code: DEL
Issuance date: 21-IX-2001
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Revision number: 01

Elastomag® Magnesium oxide

1. Identification of the substance/mixture

Product identifier: Elastomag® 170 Bulk Magnesium oxide

Supplier:

Suministro de Especialidades, S.A. de C.V.
Pastores # 30 Col. Santa Isabel Industrial, Iztapalapa.
Ciudad de México, México. C.P. 09820
TEL. 56 85 28 88
SETIQ: 01 800 00 214 00 (emergencias)

Description: Laboratory reagent, substance synthesis reagent, acid acceptor/activator in rubber.
Chemical name: Magnesium oxide.
Synonyms: Calcined Magnesia.

2. Hazards identification

2.1. Classification of the substance or mixture.

Classification (GHS-US).

This product is not classified as hazardous according to the criteria in the 2012 OSHA Hazard Communication Standard (29CFR 1910.1200).

2.2. Label elements.

GHS-US labeling.

No labeling applicable.

Signal word: Not applicable.

Hazard statements:

The product does not comply with the requirements needed to be classified as hazardous.

Precautionary statements:

Prevention: Follow the general good hygiene industrial practices.

Response: Wash hands thoroughly after handling the product.

Storage: Store away from incompatible materials.

Disposition: Dispose of wastes and residues according to the local authority requirements.

2.3. Other hazards.

No additional information available.

3. Composition/Information on ingredients**3.1. Substances.**

Formula: MgO

Molecular Weight: 40.3 g/mol

CAS No.: 1309-48-4

CE No.: 215-171-9

Chemical Name	CAS No.	Concentration	Classification (GHS-US)
Magnesium oxide	1309-48-4	98 %	Not classified
Oxides of silicon, iron, aluminium, and calcium	Mixture	2	Not classified

4. First aid measures**4.1. Description of first aid measures.****General:**

Never give anything by mouth to an unconscious person. If the affected person feels unwell, seek medical advice (show the label where possible).

Inhalation:

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

Skin contact:

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact:

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

Ingestion:

Rinse mouth. DO NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed.**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, cough, 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.

4.3. Indication of any immediate medical attention and special treatment needed.

No additional medical information found. If the affected person feels unwell, seek medical advice.

4.4. General information.

Make sure the medical staff is aware of the materials involved and take precautions to protect yourself.

5. Firefighting measures

5.1. Extinguishing media.

Suitable extinguishing media.

Not combustible. If there is a fire close by, use suitable extinguishing agents such as water fog, carbon dioxide, dry powder, foam.

Unsuitable extinguishing media.

None known.

5.2. Special hazards arising from the substance or mixture.

Fire hazard.

If heated to decomposition ($>1700\text{ }^{\circ}\text{C}$), magnesium oxide fumes may be generated.

Explosion hazard.

Product is not explosive.

Reactivity.

Reacts with: Incompatible materials.

5.3. Advice for firefighters.

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 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.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures.

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. Environmental precautions.

Prevent entry to sewers and public waters. Notify authorities if liquid/solids enter sewers or public waters.

6.3. Methods and material for containment and cleaning up.

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.

6.4. Reference to other sections.

For exposure controls and personal protection, see heading 8.

For waste disposal, see heading 13.

7. Handling and storage

7.1. 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. Conditions for safe storage, including any incompatibilities.

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; Phosphorus pentachloride – Incandescens brilliantly. NOTE: Exposure to water may cause this product to slowly hydrate, during which heat may be generated (exothermic reaction).

7.3. Specific end uses.

Reference section 1.2.

8. Exposure Controls/Personal protection

8.1. Control parameters.

Component: Magnesium oxide CAS No.1309-48-4		Control parameters
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA ACGIH	Remark (ACGIH)	(Inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³

8.2. Exposure controls.

Appropriate engineering controls.

Avoid dispersal of dust in the air (i.e. clearing dust surfaces with compressed air). Provide local exhaust ventilation of closed transfer systems to minimize exposures.

Hand protection.

Wear protective gloves: dust impervious 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.

UP TO 100 mg/m³: Any dust, mist or fume respirator; any air supplied respirator; or, self-contained breathing apparatus.

UP TO 250 mg/m³: Any supplied air respirator operated in a continuous flow mode or any powered air purifying respirator with a dust/mist/fume filter.

UP TO 500 mg/m³: High efficiency particulate filter with full face piece; any powered air supplied respirator with a tight fitting face piece and a high efficiency particulate filter; any self-contained breathing apparatus with a full face piece; any supplied air respirator with a full face piece.

UP TO 7500 mg/m³: Any air supplied respirator with a full face piece and operated in a pressure demand or other positive pressure mode.

EMERGENCY OR ENTRY INTO UNKNOWN CONCENTRATIONS: Self-contained breathing apparatus with full face piece and operated in pressure demand mode or air supplied respirator with full face piece operated in pressure demand or other positive pressure mode in combination with auxiliary self-contained breathing apparatus operated in pressure demand or positive pressure mode.

ESCAPE: Any air purifying full face piece respirator with high efficiency particulate filter or any appropriate escape type self-contained apparatus.

Other information.

When using, do not eat, drink or smoke.

9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

a) Physical state:	Solid.
b) Appearance:	Powder.
c) Molecular mass:	40.3 g/mol.
d) Color	White.
e) Odor:	Odorless.
f) Odor threshold:	No data available.
g) pH:	No data available.
h) pH solution:	10.3 saturated aqueous solution.
i) Relative evaporation rate:	No data available.
j) Melting point:	2827 (2797 – 2857) °C.
k) Freezing point:	No data available.
l) Boiling point:	3600 °C.
m) Flash point:	Product does not sustain combustion.
n) Self ignition temperature:	No data available.
o) Decomposition temperature:	>1700 °C.
p) Flammability (solid, gas):	No data available.
q) Vapor pressure:	No data available.
r) Vapor pressure at 50 °C	0 hPa.
s) Relative vapor density at 20 °C:	0
t) Relative density:	No data available.
u) Density:	3.58 g/cm ³ .
v) Solubility:	In water, material is partially soluble.
w) Log Pow:	No data available.
x) Log Kow:	No data available.

y) Viscosity:

Kinematic:

No data available.

Dynamic:

No data available.

z) Explosive properties:

Product is not explosive:

aa) Oxidizing properties:

No data available.

bb) Explosive limits:

No data available

9.2. Other information.

No additional information available.

10. Stability and reactivity

10.1. Reactivity.

Reacts with: Incompatible materials.

10.2. Chemical stability.

Stable at room temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions.

Hazardous polymerization will not occur.

10.4. Conditions to avoid.

Avoid contact with incompatible materials, excessive heat or cold; moisture.

10.5. Incompatible materials.

ACID (Strong) – Vigorous reaction, heat generated; Chlorine Trifluoride reacts violently, producing flame; Phosphorous pentachloride – Incandescens brilliant. NOTE: Exposure to water may cause this product to slowly hydrate, during which heat may be generated (exothermic reaction).

10.6. Hazardous decomposition products.

If Magnesium oxide is heated to the point of volatilization (i.e.>1700 °C), magnesium oxide fumes may be generated.

11. Toxicological information

11.1. Information on toxicological effects.

Acute toxicity.

Not classified (Based on available data, the classification criteria are not met).

Component: Magnesium oxide CAS No.1309-48-4	
LD50 Oral rat	3990 mg/kg
ATE (Oral)	3990.000 mg/kg body weight

Skin corrosion/irritation.

Not classified. (Based on available data, the classification criteria are not met).

Serious eye damage/irritation.

Not classified. (Based on available data, the classification criteria are not met).

Respiratory or skin sensitization.

Not classified. (Based on available data, the classification criteria are not met).

Germ cell mutagenicity.

Not classified. (Based on available data, the classification criteria are not met).

Carcinogenicity.

Not classified. (Based on available data, the classification criteria are not met).

Component: Magnesium oxide CAS No.1309-48-4	
IARC group	Not listed in carcinogenicity class
National Toxicology Program (NTP) Status	Not listed in carcinogenicity class.

Reproductive toxicity.

Not classified. (Based on available data, the classification criteria are not met).

Specific target organ toxicity (single exposure).

Not classified. (Based on available data, the classification criteria are not met).

Specific target organ toxicity (repeated exposure).

Not classified. (Based on available data, the classification criteria are not met).

Aspiration hazard.

Not classified. (Based on available data, the classification criteria are not met).

Potential Adverse human health effects and symptoms.

Symptoms/Injuries after inhalation:

Inhalation may cause: irritation, cough, 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.

Likely routes of exposure:

Dermal; Inhalation.

12. Ecological information

12.1. Toxicity.

No additional information available.

12.2. Persistence and degradability.

Component: Magnesium oxide CAS No.1309-48-4	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential.

Component: Magnesium oxide CAS No.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.

13. Disposal considerations

13.1. Waste treatment methods.

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.

14. Transport information

In accordance with US Department of Transportation (DOT):

Not considered a dangerous good for transport regulations.

Additional information:

Other information:

No supplementary information available.

ADR:

Transport document description: None

Transport by sea:

No additional information available.

Air transport:

No additional information available.

15. Regulatory Information

15.1. US Federal Regulations.

SARA 302 Components.

This material does not contain chemical products subjected to SARA Title III, section 302 requirements.

SARA 313 Components.

This material does not contain any chemical component exceeding the reported levels threshold (De Minimis) as any known CAS numbers established by SARA Title III, section 313.

SARA 311/312 Hazards.

Not dangerous according to Act SARA.

Massachusetts Right To Know Components

	No. de CAS	Revision date
Magnesium oxide	1309-48-4	2007-03-01

Pennsylvania Right To Know Components

	No. de CAS	Revision date
Magnesium oxide	1309-48-4	2007-03-01

New Jersey Right To Know Components

	No. de CAS	Revision date
Magnesium oxide	1309-48-4	2007-03-01

California Prop. 65 Components

This product does not contain any chemical substance known by California State that can cause cancer, birth issues, or any other reproductive damage.

15.2. International Regulations.

Jurisdiction	List	Comment
Asia Pacific	Asia – PAC	
Australia	Australia Inventory of Chemical Substances (AICS)	
	National Pollutant Inventory	Magnesium oxide fume
	Priority Existing Chemicals	
China	Inventory of Existing Chemical Substances (IECSC)	
Japan	Existing and New Chemical Substances (ENCS)	#1-465; inorganic compounds
Korea	KECI (Chemical Inventory of Korea)	KE-22728
New Zealand	Inventory of Chemicals (NZIoC)	HSNO approval
Philippines	Inventory of Chemicals and Chemical Substances (PICCS)	
Europe	EEC International Cosmetics Ingredients Inventory (INCI)	Absorbant/buffering/opacifying/additives

	EU REACH pre-registered	
	EU Inventory of Existing Commercial Chemical Substances (EINECS)	215-171-9
	German Water Hazard Class Substance List	5208
	Switzerland Giftliste 1 (List of Toxic Substances)	Classification: VwVwS
	Canadian Domesticated Substances List (DSL)	G-2368
Canada	WHMIS Ingredient List	
United States	ACGIH Threshold Limit Values (TLV)	
	EPA Pesticide Inert Ingredients	
	FDA Priority-based Assessment of Food Additives (PAFA)	
	FDA Regulations	Use as colorant
	High Production Volumen Chemicals (HPV)	
	National Toxicology Program Technical Reports List	
	NIOSH Hazard, Toxicology and Use Information	
	NIOSH Health Hazards	
	NIOSH Recommended Exposure Limits	10 mg/m ³
	OSHA Permissible Exposure Limits	8 hour: TWA, total particulates 15 mg/m ³
	Toxic Substances Control Act (TSCA) Inventory	
	Toxic Inventory Update Rule	
	TSCA Section 8A-Preliminary Assessment Information Rule (PAIR)	

16. Other information

NFPA Classification.

Health Hazard: 0

Fire hazard: 0

Reactivity Hazard: 0

The information contained herein is considered trustworthy, but should not be considered exhaustive and will only be used as an orientation. Such information is based on the current knowledge of the chemical substance and it is applicable when appropriate safety measures of the product are enforced. The information has basis in laboratory work with small scale equipment and it does not necessarily indicate the final product behaviour. The industrial scale and final product tests are the consumer responsibility. **Suministro de Especialidades, SA de CV** will not have any responsibility and the customer will entirely assume the risk and responsibility for any other material use or handling that goes beyond our direct control. The sales executive does not grant any additional explicit or implicit warranty. No information contained herein will be considered as permission, recommendation or induction to reproduce any patented invention without the explicit patent proprietary permission. □