

Heavy Magnesium Oxide - 25Kg Bag

Version 3.1

Revision Date 18.03.2016

Print Date 25.07.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Heavy Magnesium Oxide - 25Kg Bag
Substance name : magnesium oxide
CAS-No. : 1309-48-4
EC-No. : 215-171-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Raw material
stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : LEHVOSS UK Limited
West Road Congleton 20
Cheshire 4ER CW12
United Kingdom

Telephone : 0044 1 260 291 000
Responsible/issuing person : EHUS@lehvoss.de

1.4 Emergency telephone number

Telephone : (GB): National Poisons Inform. Service
0844 892 0111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

In accordance with EC directives or respective national laws, the product does not need to be classified nor labelled.

2.3 Other hazards

This substance is not considered to be very persistent and very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : magnesium oxide
CAS-No. : 1309-48-4

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EC-No. : 215-171-9

No dangerous ingredients according to Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Take off all contaminated clothing immediately.
- If inhaled : Remove to fresh air.
Oxygen or artificial respiration if needed.
Call a physician immediately.
Keep patient warm and at rest.
- In case of skin contact : Wash off with soap and water.

If skin irritation persists, call a physician.
- In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
Consult a physician.
Remove contact lenses.
- If swallowed : Do NOT induce vomiting.
Clean mouth with water and drink afterwards plenty of water.
Call a physician immediately.
Never give anything by mouth to an unconscious person.
If a person vomits when lying on his back, place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Spasm
Gastrointestinal discomfort
Local irritation
Lachrymation

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Not combustible.
- Unsuitable extinguishing media : Water

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5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition
Exposure to decomposition products may be a hazard to health.
- Hazardous combustion products : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3 Advice for firefighters

- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Ensure adequate ventilation.
Avoid contact with skin, eyes and clothing.
Avoid dust formation.
Use non-slip safety shoes in areas where spills or leaks can occur.
Sweep up to prevent slipping hazard.
Wear personal protective equipment.
Avoid breathing dust.
Immediately evacuate personnel to safe areas.

6.2 Environmental precautions

- Environmental precautions : Try to prevent the material from entering drains or water courses.

6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Pick up and transfer to properly labelled containers.
Dispose of in accordance with local regulations.
After cleaning, flush away traces with water.
Avoid dust formation.

6.4 Reference to other sections

For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Avoid creating dust.
Do not get on skin or clothing.
Avoid contact with eyes.
In case of insufficient ventilation, wear suitable respiratory equipment.
Smoking, eating and drinking should be prohibited in the ap-

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plication area.
 Wash face, hands and any exposed skin thoroughly after handling.
 Avoid inhalation, ingestion and contact with skin and eyes.

Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

Hygiene measures : Preventive skin protection (protective ointment for the skin)
 Ensure that eye flushing systems and safety showers are located close to the working place.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Ambient temperature
 Store in original container.
 Keep container tightly closed and dry.

Further information on storage conditions : This product is hygroscopic.
 Avoid moisture.

Advice on common storage : Do not store near acids.

Storage class (TRGS 510) : 13, Non Combustible Solids

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
magnesium oxide	1309-48-4	TWA (inhalable dust)	10 mg/m ³ (Magnesium)	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates			

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magnesium oxide	1309-48-4	TWA (Respirable dust)	4 mg/m ³ (Magnesium)	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m ⁻³ 8-hour TWA of inhalable dust or 4 mg.m ⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
magnesium oxide	1309-48-4	TWA (Fumes)	4 mg/m ³ (Magnesium)	GB EH40
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Further occupational exposure limits

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8.2 Exposure controls

Engineering measures

Effective exhaust ventilation system

Personal protective equipment

Eye protection : Tightly fitting safety goggles

Hand protection

Material : Protective gloves

Remarks : Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Half mask with a particle filter P2 (EN 143)
Dust safety masks are recommended when the dust concentration is more than 10 mg/m³.

Protective measures : When using do not eat, drink or smoke.
Keep away from food, drink and animal feedingstuffs.
Avoid contact with the skin and the eyes.
Wash thoroughly after handling.
Ensure that eye flushing systems and safety showers are located close to the working place.
Do not breathe spray.
Handle in accordance with good industrial hygiene and safety practice.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: fine powder granular
Colour	: off-white
Odour	: odourless
pH	: ca. 10,4, 4 %
Melting point/range	: > 2.500 °C
Boiling point/boiling range	: ca. 3.600 °C
Flash point	: Not applicable
Evaporation rate	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Vapour density	: Not applicable
Relative density	: 3,58 - 3,65
Density	: 3,6 g/cm ³
Bulk density	: No data available
Water solubility	: slightly soluble
Solubility in other solvents	: Solvent: Alcohol insoluble Solvent: Acids soluble
Partition coefficient: n- octanol/water	: No data available
Auto-ignition temperature	: No data available
Viscosity, dynamic	: No data available

9.2 Other information

No data available

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SECTION 10: Stability and reactivity

10.1 Reactivity

Exothermic reaction with acids.

10.2 Chemical stability

No decomposition if stored and applied as directed., Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Exothermic reaction with acids.
Reacts with water.
Oxidizing materials, halogens, and halogenated compounds.

10.4 Conditions to avoid

Conditions to avoid : Protect from moisture.
Avoid dust formation.
Exposure to air.

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents
Water
Halogens

10.6 Hazardous decomposition products

Hazardous decomposition products : Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : LD50 Oral Rat: 3.800 - 4.000 mg/kg

Acute dermal toxicity : LD50 Rabbit: > 2.000 mg/kg
Target Organs: Skin

Skin corrosion/irritation

Product:

Prolonged skin contact may defat the skin and produce dermatitis.
May cause irritation of respiratory tract.

Serious eye damage/eye irritation

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Product:

slight irritation
Dust contact with the eyes can lead to mechanical irritation.

Respiratory or skin sensitisation

Product:

No known sensitising effect.

Germ cell mutagenicity

No data available

Carcinogenicity

Product:

not hazardous

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Fish): > 10.000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10.000 mg/l
Exposure time: 48 h

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not biodegradable
The methods for determining biodegradability are not applicable to inorganic substances.

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12.3 Bioaccumulative potential

Product:

Bioaccumulation : Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : No data available

12.4 Mobility in soil

Product:

Mobility : No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Product:

Additional ecological information : not water endangering
The product should not be allowed to enter drains, water courses or the soil.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with the European Directives on waste and hazardous waste.

Contaminated packaging : Dispose of in accordance with local regulations.

SECTION 14: Transport information

14.1 UN number

ADR : Not dangerous goods
RID : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.2 Proper shipping name

ADR : Not dangerous goods
RID : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

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14.3 Transport hazard class

ADR : Not dangerous goods
RID : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.4 Packing group

ADR : Not dangerous goods
RID : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.5 Environmental hazards

ADR : Not dangerous goods
RID : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Other regulations : The product does not need to be labelled in accordance with EC directives or respective national laws.

Magnesium oxide is exempted from registration, due to REACH regulation, annex V and regulation 987/2008/EC

The components of this product are reported in the following inventories:

EINECS : Update: 1990-06-15
Listed
Notification number: 215-171-9

EU. REACH - Annex V : Update: 2010-10-02
Listed

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

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SECTION 16: Other information

Further information

Contact Point : Business Unit Magnesia

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.