

Safety Data Sheet

Page : 1/6

According to Regulation (EC) No 1907/2006

Issue date : September 15.1999

Revision # 3, date : March 20, 2020

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

1.1 Identification of the substance :

Trade name:	Magnesium oxide
Chemical name:	Magnesium oxide
Identification number:	CAS No: 1309-48-4
Registration number:	Not available

1.2 Use of the substance :

Identified uses:	mineral supplements, pharmaceutical grade Mg derivatives, antacid preparations
Unrecommended uses:	---

1.3 Company/undertaking identification :

Macco Organiques, s. r.o.

Zahradní 46c, 792 01 Bruntál, Czech Republic

IČ : 26819210 , phone: +420 – 555 – 530 334

SDS provider's contact: Jaroslav Zavadil , phone: +420 – 555 – 530 340, jaroslav.zavadil@macco.cz

1.4 Emergency telephone:

The first aid details may be consulted with toxicological information centre (TIS): Job-related illness clinic, Na Bojišti 1, 128 08 Praha 2, tel. 2 24 91 92 93 or 2 24 91 54 02. Permanent poisoning information.

2: Hazard identification

The substance is **NOT** classified as dangerous according to Directive 1272/2008/ES.

2.1 Classification of the substance:

Acc. to Directive 1272/2008/ES	---
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The most important adverse physicochemical, human health and environmental effects and symptoms :

Not specified.

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

2.2 Information on the label:

Hazard pictogram	---	Signal word	---
Hazard statements	---		
Precautionary statements	---		
Additional information on label	none		

2.3 Other dangerousness:

Substance is NOT classified as PBT or vPvB.

3: Composition / information on ingredients

3.1 Substance

3.1.1 Constituent

Chemical identity	Index No.	CAS	EINECS	concentration	classification list number
Magnesium oxide	none	1309-48-4	215-171-9	99 – 100%	---

3.1.2 Impurities, stabilizers,

Chemical identity	Index No.	CAS	EINECS	concentration	classification list number
none	---	---	---	---	---

4: First aid measures

In all cases provide the physical and mental rest and avoid of getting chilled. In case of health problems or doubts inform physician and provide him with the information contained in this safety data sheet. Never pass a medication to a unconscious person. Maintain personal safeness during rescue operation.

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Page : 2/6

Issue date : September 15.1999

Revision # 3, date : March 20, 2020

4.1 First aid description:

If inhaled:

Stop exposition, move the afflicted person to the fresh air. Apply artificial respiration if necessary and get medical attention immediately.

In the event of skin contact:

Remove contaminated clothes and footwear. Wash of any skin contamination with cool water and soap. Launder clothes before re-use. In case of persisting irritation contact physician .

In the event of eye contact:

Remove contact lenses if present. Rinse with a small amount of water for at least 10 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention.

Do not use neutralization solution!

If swallowed:

Wash out mouth with water and give plenty of water to drink (at least 300 ml). Do not induce vomiting. Get medical attention immediately.

4.2 The most important acute and belated symptoms and effects:

Not specified

4.3 Immediate medical help instruction and special treatment:

Treat symptomatically and supportively. No specific antidote.

5: Fire fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Non-combustible substance . All extinguishing media are allowed, select the appropriate extinguishing media depending on the surrounding fire and environment.

Not suitable extinguishing media :

Strong water jet

5.2 Specific hazards :

Non-combustible substance.

5.3 Special protective actions for fire-fighters:

Use individual breathing apparatus, anti-gas safety clothing.

6: Accidental release measures

6.1 Personal precautions:

Use personal safety working clothes – section 8. Prevent from skin and eye contact. Do not inhale dust. Well ventilate areas. Prevent from dust making. Other safety precautions – section 7.

6.2 Environmental precautions:

Prevent from escape to watercourses and soil and from their contamination.

6.3 Methods for cleaning up:

Clean up contamination/spillages as soon as they occur. Collect as much as possible in a suitable clean container, preferably for re-use, otherwise for disposal (according section 13). Avoid generation of dust. Wash the spillage area with large quantities of water. When packaging is damaged, replace the amount into a new packaging with proper marking.

6.4 Other sections references:

Also follow the regulations in sections 8 and 13 of this safety data sheet.

7: Handling and storage

7.1 Handling:

Use the personal safety tools (section 8). Ensure fresh water for the first aid. Maintain the cleanness and tidiness on the working area. Do not eat, drink or smoke during work. Avoid contact with skin and eyes. Wash hands duly with soap and water, take a shower. Use a body lotion.

Safety Data Sheet

Page : 3/6

According to Regulation (EC) No 1907/2006

Issue date : September 15.1999

Revision # 3, date : March 20, 2020

7.2 Storage:

Store at a dry place, not above normal room temperature away from incompatible materials (section 10).

7.3 Specific uses:

mineral supplements, pharmaceutical grade Magnesium derivatives, antacid preparations

8: Exposure controls / personal protection**8.1 Exposure limit values****8.1.1 Exposure limits**OSHA: PEL-TWA = 15 mg/m³USA (ACGIH): TLV-TWA = 10 mg/m³**8.1.2 Biological limit values:**

- not specified

8.1.3 DNEL and PNEC values:

- not specified

8.2 Exposure control**8.2.1 Occupational exposure control:**

Operate in a well-ventilated area, avoid inhalation of dusts. Ensure shower and area for eyes rinsing. The mentioned personal safety instruments should be in compliance with EN standards.

Personal protective equipment:*Respiratory protection:*

In the case of high dust levels wear suitable respiratory protective equipment, ie. dust mask or respirator conforming to EN standards. Recommended filter = particle filter, P2.

Hand protection:

Wear suitable chemical resistant protective gloves for frequent or prolonged operations tested to EN374 with an acceptable permeation test. Suitable materials include neoprene (chloroprene), PVC and nitrile rubber. Contaminated gloves should be carefully rinsed with water before reuse. Non suitable materials: Leather gloves.

Eye / face protection:

Wear suitable eye/face protection. Most materials for protective goggles and face visors will probably be suitable eg. polycarbonate.

Skin and body protection:

Normal working clothes is suitable.

Do not eat, drink or smoke during work. Remove contaminated clothing. Wash hands duly with soap and water. Use a body lotion.

8.2.2 Environmental exposure controls:

Prevent from escape to environment.

9: Physical and chemical properties**9.1 General information :****Physical state (at 20 °C):**

Solid – powder or granulated powder

Colour:

white

Odour (fragrance):

odourless

Threshold odour value:

odourless

9.2 Important health, safety and environmental information :**pH (at 20 °C):**

10,0 – 10,3

Melting point:

2500 - 2800 °C

Boiling point:

3600 °C

Flash point:

Not applicable, incombustible matter

Evaporation rate:

Not applicable

Flamability (solid, gas) :

The substance is non-flammable

Explosion limits*lower:*

Not available, non-explosive matter

upper:

Not available, non-explosive matter

Vapour pressure:

irrelevant

Vapour density:

irrelevant

Relative density:3,57 g/cm³**Water solubility (at 20 °C) :**0,0009 g / 100 ml, the solubility in water rises by CO₂.

Safety Data Sheet

Page : 4/6

According to Regulation (EC) No 1907/2006

Issue date : September 15.1999

Revision # 3, date : March 20, 2020

Solubility in solvents:	Soluble in diluted acids. Insoluble in alcohol
Partition coefficient n-octanol/water:	Not available
Self-ignition temperature:	Not applicable
Decomposition temperature:	Not available
Viscosity:	Not applicable
Explosive properties:	The substance is non-explosive
Oxidizing properties:	The substance is non-oxidizing
9.3 Other information:	
Fat solubility:	Not available
Conductivity:	Not available
Gas group:	Not applicable

10: Stability and reactivity

Stable under recommended storage and handling conditions.

10.1 Conditions to avoid:

Sensitive to moisture and air. Absorbs CO₂ from air.

10.2 Materials to avoid:

Strong acids. Violent reaction with interhalogens (e.g. bromine pentafluoride, chlorine trifluoride).

10.3 Hazardous decomposition products:

None

11: Toxicological information

Acute toxicity:	
- LD ₅₀ oral, rat (mg.kg ⁻¹):	3870 (male) ; 3990 (female)
- LD ₅₀ dermal, rabbit (mg.kg ⁻¹):	---
- LD ₅₀ inhalation, rat, for aerosols or particles (mg.l ⁻¹):	---
- TCLo human inhallation (mg.m ⁻³):	400
Skin irritation:	No irritation
Eye irritation:	May cause eye irritation
Sensitisation:	Substance does not have sensitive effects on skin and respiratory system
Carcinogenicity:	Not classified by IARC Not included in NTP 11th Report on Carcinogens ACGIH TLV - A4 Not classifiable as a human carcinogen
Mutagenicity:	Not mutagenic substance
Toxicity for reproduction:	Not toxic substance for reproduction
Toxicity for specific target body – single exposition	Substance does not have toxic effects within single exposition
Toxicity for specific target body – repeated exposition:	Substance does not have toxic effects within repeated exposition
Irritation if inhaled:	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.
Other information: none	

12: Ecological information

12.1 Ecotoxicity:	
- LC ₅₀ 96 hr., fish (mg.l ⁻¹):	Not specified
- EC ₅₀ 48 hr., daphnia (mg.l ⁻¹):	Not specified
- EC ₅₀ 72 hr. algae (mg.l ⁻¹):	Not specified
12.2 Mobility :	Not specified
12.3 Persistence and degradability:	Not specified (not relevant for inorganic substances)

Safety Data Sheet

Page : 5/6

According to Regulation (EC) No 1907/2006

Issue date : September 15.1999

Revision # 3, date : March 20, 2020

12.4 Bioaccumulative potential:

Not specified

12.5 Results of PBT assessment:

Substance is not classified as PBT or vPvB.

12.6 Other adverse effects:

Not specified.

13: Disposal considerations

13.1 Product:

If recycling or reuse is not practical then the product must be disposed of by authorized personnel in accordance with local, state or national regulations. Never dispose by flushing into the drainage! Waste former is responsible for its sorting and disposal.

Special safety precaution for recommended waste treatment:

Preferably dispose in independent container. Do not dispose of with acids.

13.2 Packaging:

If recycling or reuse is not practical then packaging must be disposed of by authorized personnel in accordance with local, state or national regulations. Clean packaging with water and dispose of washings in accordance to local regulations. Packaging can be passed to a packaging return system after the cleaning.

13.3 Legal waste regulations:

Directive 2008/98/ES

National or regional provisions may be in force !

14: Transport information

14.1 ADR/RID (Land Transport) :

Not classified as hazardous for transportation.

14.2 ADN/ADNR (Inland Waterway Transport):

Not classified as hazardous for transportation.

14.3 IMDG (Marine Transport) :

Not classified as hazardous for transportation.

14.4 ICAO/IATA (Air Transport) :

Not classified as hazardous for transportation.

15: Regulatory Information

15.1 Health, safety and environmental information on the label : ---

15.2 Chemical Safety Assessment:

Not available

15.3 National legislation:

Regulation (EC) No. 1907 / 2006 / ES, REACH

Regulation (EC) No. 1272 / 2008 / ES, CLP

National laws or provisions may be in force !

USA Reported in the EPA TSCA Inventory

Australia Listed in AICS. This substance is on the National Pollutant Inventory (NPI) of Australia. Magnesium Oxide (fume) is listed in the list of designated hazardous substances (NOHSC).

New Zealand Inventory Listed in NZIoC

Canada Listed in DSL

Japanese METI ENCS No.:1-465

China inventory Listed

Korea Listed in the Korea Existing Chemicals Inventory (KECI), number 22728

Philippines Listed in PICCS

16: Other information

Changes made in Safety Data Sheet in terms of revision:

Revision of Safety data sheet in terms of avoidance of Directive 67/548/EHS.

Safety Data Sheet

Page : 6/6

According to Regulation (EC) No 1907/2006

Issue date : September 15.1999

Revision # 3, date : March 20, 2020

Key or explanation for abbreviations:

DNEL Derived No Effect Level (derived concentration of substance, at which no unfavourable effects occur)
PNEC Predicted No Effect Concentration (prediction of substance concentration, at which no unfavourable effects occur)

Important literature references and data sources:

SDS of other producers, special literature, ECHA web. site <http://apps.echa.europa.eu/registered/registered-sub.aspx>)

Training instructions:

Before handling this substance, the personnel involved should be instructed by means of this safety data sheet.

Recommended restrictions of use:

Not specified

Other :

The information contained herein were processed and compiled in accordance with the latest state-of-the-art. Although having been compiled in an utmost good faith, they do not deliver or guarantee any of the product properties, thus they cannot constitute an official base for any contract or legal relation. Various factors may affect the properties under certain conditions. It is the user sole responsibility to assess and consider the accuracy and veracity of the above-indicated information in particular application and/or environment.