



Polymer Add (Thailand) Co; Ltd.

Safety Data Sheet

MAGNESIUM OXIDE

Revision date :

Page: 1/6

Version : 3.0

NUMBER

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

| | |
|---------------|-----------------|
| Chemical Name | MAGNESIUM OXIDE |
| CAS NO. | 1309-48-4 |

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

1. MgO is used as a refractory material for crucibles. It is also used as an insulator in heat-resistant electrical cable.
2. MgO is one of the components in Portland cement in dry process plants.
3. It is a principal fireproofing ingredient in construction materials.

Details of the supplier of the safety data sheet

COMPANY

POLYMER ADD (THAILAND) CO., LTD.
106, Chalaremprikiat, Lor 9, Soi 22, Yak
5, Nongbon, Prawet, Bangkok
Bangkok - 10250
Thailand
Telephone : 0804531391
Email - contact@polymeradd.co.th

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

| | |
|-------------------------------|----------------------------------------------------------------------------------|
| Physical and Chemical Hazards | Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. |
|-------------------------------|----------------------------------------------------------------------------------|

2.2 Labelling according Regulation (EC) No 1272/2008 [CLP]

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

| | |
|-------------------|------|
| 2.3 Other hazards | none |
|-------------------|------|

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Component

| | |
|-------------------|-----------------|
| Chemical Name | MAGNESIUM OXIDE |
| CAS NO | 1309-48-4 |
| EC Number | 215-171-9 |
| Molecular Formula | MgO |
| Molecular Weight | 40.31 |
| Concentration | |

Safety Data Sheet

MAGNESIUM OXIDE

Revision date :

Page: 2/6

Version : 3.0

NUMBER

4 FIRST AID MEASURES

4.1 Description of first aid measures

| | |
|--------------------------------|--------------------------------------------------------------------------------------------|
| If inhaled | If breathed in, move person into fresh air. If not breathing, give artificial respiration. |
| In case of skin contact | Wash off with soap and plenty of water. |
| In case of eye contact | Flush eyes with water as a precaution. |
| If swallowed | Never give anything by mouth to an unconscious person. Rinse mouth with water. |

4.2 Most important symptoms and effects, both acute and delayed

Ingestion or inhalation of a large quantity may cause a feverish reaction and leukocytosis., Diarrhoea

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5 FIREFIGHTING MEASURES

5.1 Extinguishing media

| | |
|-------------------------------------|--------------------------------------------------------------------------|
| Suitable extinguishing media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
|-------------------------------------|--------------------------------------------------------------------------|

5.2 Special hazards arising from the substance or mixture

Magnesium oxide

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Safety Data Sheet

MAGNESIUM OXIDE

Revision date :

Page: 3/6

Version : 3.0

NUMBER

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 Information about protection against explosions and fires

No data available

7.3 Conditions for safe storage including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. hygroscopic Air sensitive. Air and moisture sensitive.

7.4 Specific end use(s)

no data available

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Appropriate engineering controls

General industrial hygiene practice.

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9 PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------------|-------------------|
| a) Appearance | WHITE POWDER |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH (% solution in water) | no data available |

Safety Data Sheet

MAGNESIUM OXIDE

Revision date :

Page: 4/6

Version : 3.0

NUMBER

| | |
|------------------------------------------------|------------------------|
| e)Melting point/freezing point | 2852 °C - lit. |
| f)Initial boiling point and boiling range | 3600 °C at 1.013 hPa |
| g)Flash point | not applicable |
| h)Evaporation rate | no data available |
| i)Flammability (solid or gas) | no data available |
| j)Upper/lower flammability or explosive limits | no data available |
| k)Vapour pressure | no data available |
| l)Vapour density | no data available |
| m)Relative density | 3580 g/cm ³ |
| n)Water solubility | insoluble |
| o)Partition coefficient: n-octanol/water | no data available |
| p)Autoignition temperature | no data available |
| q)Decomposition temperature | no data available |
| r)Viscosity | no data available |
| s)Explosive properties | no data available |
| t)Oxidizing properties | no data available |

9.2 Other safety information

10 STABILITY AND REACTIVITY

| | | |
|------|------------------------------------|---------------------------------------------------------------------------------------------|
| 10.1 | Reactivity | no data available |
| 10.2 | Chemical stability | no data available |
| 10.3 | Possibility of hazardous reactions | no data available |
| 10.4 | Conditions to avoid | Air sensitive |
| 10.5 | Incompatible materials | Strong oxidizing agents, May react violently with:, phosphorous pentachloride, Strong acids |
| 10.6 | Hazardous decomposition products | Other decomposition products - no data available |

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| | |
|------------------------------------------|-------------------|
| Acute toxicity | no data available |
| Skin corrosion/irritation | no data available |
| Serious eye damage/eye irritation | no data available |
| Respiratory or skin sensitization | no data available |

Safety Data Sheet

MAGNESIUM OXIDE

Revision date :

Page: 5/6

Version : 3.0

NUMBER

| | |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Germ cell mutagenicity | no data available |
| Carcinogenicity | Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Olfaction: Tumors. Lungs, Thorax, or Respiration: Tumors. |
| IARC | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| Reproductive toxicity | no data available |
| Specific target organ toxicity - single exposure | no data available |
| Specific target organ toxicity - repeated exposure | no data available |
| Aspiration hazard | no data available |
| Inhalation | May be harmful if inhaled. May cause respiratory tract irritation. |
| Ingestion | May be harmful if swallowed. |
| Skin | May be harmful if absorbed through skin. May cause skin irritation. |
| Eyes | May cause eye irritation. |
| RTECS | OM3850000 |

12 ECOLOGICAL INFORMATION

| | |
|-------------------------------------------|-------------------|
| 12.1 Toxicity | no data available |
| 12.2 Persistence and degradability | |
| Biodegradation | |
| no data available | |
| 12.3 Bio accumulative potential | no data available |
| 12.4 Mobility in soil | no data available |
| 12.5 Results of PBT and vPvB assessment | no data available |
| 12.6 Other adverse effects | no data available |

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product



Safety Data Sheet
MAGNESIUM OXIDE

Revision date :
Version : 3.0

Page: 6/6

NUMBER

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14 TRANSPORT INFORMATION

14.1 UN number

| ADR/RID | IMDG | IATA |
|---------|------|------|
| - | - | - |

14.2 UN proper shipping name

| ADR/RID | IMDG | IATA |
|---------------------|---------------------|---------------------|
| Not dangerous goods | Not dangerous goods | Not dangerous goods |

14.3 Transport hazard class(es)

| ADR/RID | IMDG | IATA |
|---------|------|------|
| - | - | - |

14.4 Packaging group

| ADR/RID | IMDG | IATA |
|---------|------|------|
| - | - | - |

14.5 Environmental hazards

| ADR/RID | IMDG Marine pollutant | IATA |
|---------|-----------------------|------|
| NO | NO | NO |

14.6 Special precautions for user

15 REGULATORY INFORMATION

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

no data available

15.2 Chemical Safety Assessment

no data available

16 OTHER INFORMATION

| | |
|-------------------|------------|
| Month of Creation | March 2023 |
| Month of Revision | March 2027 |