HUBER | MARTINSWERK

SAFETY DATA SHEET

MAGNIFIN® H-5; MAGNIFIN®H-7; MAGNIFIN®H-10

MoEL's Public Notice No. 2016-19 Standards for Classification and Labeling of Chemical Substances and Safety Data Sheet (SDS)

Section 1: PRODUCT AND COMPANY IDENTIFICATION

A. Product name MAGNIFIN® H-5; MAGNIFIN®H-7; MAGNIFIN®H-10

Chemical Name Magnesium Hydroxide

Pure substance/mixture Substance

Magnesium hydroxide
CAS Number 1309-42-8
Weight-% >=99

B. Recommended use and Limitations on use

Recommended Use Flame retardant

Uses advised against None known

C. Supplier information

Company Name
MARTINSWERK GmbH
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Germany
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Section 2: HAZARDS IDENTIFICATION

A. Hazard category/Classification

Physical Hazards Not classified

Health Hazards Not classified

Environmental Hazards Not classified

B. Warning label items including precautionary statement

Label Elements

Symbols/Pictograms None

Signal Words None

Hazard Statements None

Precautionary statement

Prevention Employ good industrial hygiene practice

Response Wash skin with soap and water

Storage Store away from incompatible materials

Disposal Disposal should be in accordance with applicable regional, national and local laws and regulations

C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard)
None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture Substance

Chemical Name	CAS Number	S. Korea (KECL)	Korean GHS Classification	Weight-%
Magnesium hydroxide	1309-42-8	KE-22716	Not classified	>=99

Section 4: FIRST AID MEASURES

A. In case of eye contact Rinse with water. Get medical attention if irritation develops and persists.

B. In case of skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

C. In case of inhalation Move to fresh air. Call a physician if symptoms develop or persist.

D. In case of swallowing Rinse mouth. Get medical attention if symptoms occur.

E. Note to physician Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

A. Suitable (and unsuitable) extinguishing media

Suitable extinguishing Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

media
Unsuitable extinguishing media None known

B. Specific hazards arising from the chemical (example: hazardous combustion products)

Explosion hazard: None known

C. Specific methods of fire-fighting
Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In the event of fire and/or explosion do not breathe fumes. Move container from fire area if it can be done without risk.

Section 6: SPILLAGE, ACCIDENTAL RELEASE MEASURES

A. Personal precautions, protective equipment and emergency measures Ensure adequate ventilation. Avoid dust formation. See section 8 for more information.

B. Environmental precautions Not considered to be harmful to aquatic life. Avoid discharge into drains, water courses or onto the ground.

C. Methods and materials for containment and cleaning up Vacuum or sweep material and place in a disposal container.

Section 7: HANDLING AND STORAGE

A. Precautions for safe handling
In case of exposure to environments exceeding the occupational exposure limit, wear a respirator in compliance with national legislation.

B. Conditions for safe storage (including any incompatibilities)
Keep container tightly closed in a dry and well-ventilated place

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limit values, biological limit values, etc

Magnesium hydroxide

Korea	TWA: Not established
ACGIH	STEL: Not established
OSHA	TWA: Not established

B. Engineering Controls

Engineering Measures Do not handle until all safety precautions have been read and understood
Ensure adequate ventilation, especially in confined areas
Provide a good standard of controlled ventilation (10 to 15 air changes per hour)

Use exhaust ventilation to keep airborne concentrations below exposure limits
In case of insufficient ventilation, wear suitable respiratory equipment

C. Personal protective equipment

- **Eye protection** — If contact is likely, safety glasses with side shields are recommended.
- **Hand protection** — For prolonged or repeated skin contact use suitable protective gloves.
- **Body protection** — Wear suitable protective clothing.

Hygiene Measures — Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid Powder
Color	White
Odor	Odorless
Odor Threshold	No information available
pH:	+/- 10 (10% H2O)
Melting point / Freezing point	Not applicable
Melting point / Freezing point	Decomposes at > 320 °C
Initial boiling point and boiling range	Not applicable
Flash Point	Not applicable Product/Substance is inorganic
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Relative Density	2.4 g/cm3, 20° C
Water Solubility	Insoluble
Solubility in other solvents	No data available
Partition coefficient	Not applicable Product/Substance is inorganic
Autoignition Temperature	Not applicable
Decomposition Temperature	> 320 °C
Kinematic viscosity	Not applicable. :. Solid.
Dynamic viscosity	Not applicable. :. Solid.
Oxidizing Properties	None

9.2. Other information

No data available

Section 10: STABILITY AND REACTIVITY

A. Stability and hazardous reaction potential

Stability	Stable under normal conditions
Hazardous reaction potential	None known

B. Conditions to avoid (e.g. static discharge, shock or Vibration, etc) Avoid creating dust. Incompatible materials.

C. Incompatible materials Strong oxidizing agents

D. Hazardous decomposition products No hazardous decomposition products are known.

Section 11: TOXICOLOGICAL INFORMATION

A. Information on likely routes of exposure

• **Mouth**	Not an expected route of exposure
• **Eyes**	Dust contact with the eyes can lead to mechanical irritation
• **Skin**	Prolonged skin contact may cause temporary irritation.

B. Information on health hazards

Magnesium hydroxide

Oral LD50	> 2000 mg/kg mg/kg Rat
Inhalation LC50	> 2.1 mg/L 4- hours

Magnesium hydroxide

Chronic Effects	NOAEL (No observed adverse effect level) >1000 mg/kg bw/day
Serious eye damage/eye irritation	Rabbit : Non-irritant Dust may cause mechanical irritation to eyes
Skin Corrosion/Irritation	in vitro : Non-irritating to the skin Repeated exposure may cause skin dryness or cracking
Reproductive Toxicity	Not classified NOAEL (No observed adverse effect level) 1000 mg/kg bw/day
Specific target organ toxicity - Single exposure	No information available.
Specific target organ toxicity - Repeated exposure	Not classified.

Section 12: ECOLOGICAL INFORMATION

A. Ecotoxicity

Hazardous to the aquatic environment, acute hazard	Not classified Avoid runoff to waterways and sewers

Hazardous to the aquatic environment, long-term hazard	Not classified Avoid runoff to waterways and sewers

Magnesium hydroxide

96-Hour LC50	776 mg/l. Fish.
72-Hour EC50	> 100 mg/L. Algae.
48-Hour EC50	170.86 mg/l. Daphnia Magna (Water Flea).

B. Persistence/degradability No data available

C. Bioaccumulative potential No data available

D. Mobility in soil No data available

E. Other adverse effects No data available

Section 13: DISPOSAL CONSIDERATIONS

A. Method of disposal
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

B. Disposal considerations (including disposal of contaminated containers or packaging) Disposal should be in accordance with applicable regional, national and local laws and regulations

Section 14: TRANSPORT INFORMATION

Mode of Transportation (Road, Water, Air, Rail)

ADR	Not regulated
RID	Not regulated
ADN	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
ICAO	Not regulated

14.1. UN number None

14.2. UN proper shipping name None

14.3. Transport hazard class(es) None

14.4. Packing group None

14.5. Environmental hazards No

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

A. Method of disposal
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

B. Disposal considerations (including disposal of contaminated containers or packaging) Disposal should be in accordance with applicable regional, national and local laws and regulations

Section 15: REGULATORY INFORMATION

National Regulations

Magnesium hydroxide

CAS Number 1309-42-8
Weight-% >=99
Korean GHS Classification Not classified

Other domestic and foreign regulations

Global Inventories

Chemical Name	CAS Number	EC No	EU REACH registration number	Australia (AIIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	New Zealand	Philippines (PICCS)	Taiwan	TSCA: United States
Magnesium hydroxide	1309-42-8	215-170-3	01-2119488756-18-0000	Y	Y	Y	(1)-386 ENCS; ISHL	KE-22716	Y	Y	Y	Y	A

X / Y: Complies ; A: Active ; - / N: Exempt / Not Listed

Section 16: OTHER INFORMATION

A. Source of Information

Abbreviations and acronyms IARC (International Agency for Research on Cancer)

IATA (International Air Transport Association)
IMDG (International Maritime Dangerous Goods)
IUCLID (International Uniform Chemical Information Database)
WHMIS (Workplace Hazardous Materials Information System)
DOT (Department of Transportation)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
TWA (Time-Weighted Average)
CLP (The Classification, Labeling and Packaging of Substances and Mixtures Regulation (EC 1272/2008))
PPE (Personal Protection Equipment)
NIOSH (National Institute for Occupational Safety and Health)
TDG (Transport of Dangerous Goods) Canada
CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)
RQ (Reportable Quantity) (RQ/% in mixture)
STEL (Short Term Exposure Limit)
TLV® (Threshold Limit Value)
DNEL (Derived No Effect Level)
SVHC (Substances of Very High Concern)
BOD (Biochemical oxygen demand)
COD (Chemical oxygen demand)
ICAO (International Civil Aviation Organization)
IMDG (International Maritime Dangerous Goods)
ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
RID (Agreement Concerning the International Carriage of Dangerous Goods by Rail)
SCBA (Self-Contained Breathing Apparatus) Positive Pressure
PNEC (Predicted No Effect Concentration)
TSCA (Toxic Substances Control Act)
GHS (Globally Harmonized System)

B. Issue Date 21/Aug/2023
Print Date 21/Aug/2023

C. Number of revisions and Date of most recent revision 1.3.1

D. Other

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End of Safety Data Sheet