

**MAGNIFIN® H-5A; MAGNIFIN® H-10A**

Japan-JIS Z 7253:2019
Occupational Safety and Health Act
GHS (Globally Harmonized System)

Issue Date 21/Aug/2023
Print Date 28/Aug/2023

Revision Number 1.3.2
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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	MAGNIFIN® H-5A; MAGNIFIN® H-10A
Chemical Name	Magnesium Hydroxide (surface modified)
Pure substance/mixture	Mixture
<u>Magnesium hydroxide</u>	
CAS Number	1309-42-8
Weight-%	>=97
<u>Surface modified magnesium hydroxide with substituted silane</u>	
CAS Number	Proprietary
Weight-%	1-2
Recommended Use	Additive : Flame retardant
Company:	MARTINSWERK GmbH Kölner Strasse 110 50127 Bergheim Germany Tel. : +49-2271-90.22.78 Fax. : +49-2271-90.27.17
Internet	www.huberadvancedmaterials.com
E-mail	hubermaterials@huber.com
Emergency Telephone Number	CHEMTREC: +1 800 424 9300 or International +1 703 527 3887 +81 03-3560-7316

2. HAZARD IDENTIFICATION

Japan GHS Classification	
Physical Hazards	Not classified
Health Hazard	Not classified
Environmental Hazards	Not classified
GHS label elements	
Symbols/Pictograms	None
Signal Word	None
Hazard statements	Based on available data, the classification criteria are not met
Precautionary Statements	

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Prevention	Do not handle until all safety precautions have been read and understood Employ good industrial hygiene practice Do not breathe dust
Response	IF exposed or concerned: Get medical advice/attention Wash with plenty of soap and water
Storage	Store away from incompatible materials. Keep in a dry place
Disposal	Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture Mixture

Chemical Name	CAS Number	Weight-%
Magnesium hydroxide	1309-42-8	>=97
Surface modified magnesium hydroxide with substituted silane	Proprietary	1-2

4. FIRST AID MEASURES

If inhaled:	Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF ON SKIN:	Wash with plenty of soap and water Take off contaminated clothing and wash before reuse
IF IN EYES:	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Call a physician if irritation develops and persists
If swallowed:	Rinse mouth thoroughly with water
Self-Protection of the First Aider	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water spray (fog) Foam Dry chemical Carbon dioxide (CO ₂)
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Unsuitable Extinguishing Media Do not use water jetstream

Special hazards arising from the substance or mixture Avoid dust formation

Fire-fighting measures In case of fire and/or explosion do not breathe fumes
Water mist may be used to cool closed containers
Keep unauthorized personnel away

Special Protective Equipment for Firefighters Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment and Precautions for Firefighters Avoid dust formation
Ensure adequate ventilation
Use personal protection recommended in Section 8
Avoid contact with eyes and skin. Wear suitable personal protection equipment.
Keep unauthorized personnel away

Environmental Precautions Keep out of drains, sewers, ditches and waterways
Disposal considerations
See section 13 for more information

Methods and material for containment and cleaning up Large Spill: Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust
Small Spill: Vacuum or sweep material and place in a disposal container Minimize use of water during clean-up
Recommended filter type: High efficiency particulate air filter (HEPA filter)

Other Information Not applicable

7. HANDLING AND STORAGE

Handling

Technical measures Provide adequate ventilation as well as local exhaust at critical locations
Ensure adequate ventilation
Use personal protection equipment
See section 8 for more information

Advice on safe handling Minimize dust generation and accumulation

Conditions for safe storage, including any incompatibilities Keep containers tightly closed in a cool, well-ventilated place

Hygiene Measures Wash hands thoroughly after handling

Storage

Packaging compatibilities Keep/store only in original container

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits Provide adequate ventilation as well as local exhaust at critical locations

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Magnesium hydroxide

Japan

TWA: Not established

Engineering Measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Respiratory Protection

In case of inadequate ventilation wear respiratory protection

Hand protection

For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn

Eye Protection

Wear safety glasses with side shields (or goggles)

Skin and Body Protection

Wear suitable protective clothing.
Chemical resistant apron.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice
Wash thoroughly after handling
Avoid contact with eyes and skin
Do not breathe dust

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid, Powder
Color	White
Odor	Odorless
Odor Threshold	No information available
Melting Point / Melting Range	No data available
Boiling Point	No data available
Freezing Point	No information available
Autoignition Temperature	Not applicable
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Explosive Properties	No data available
Vapor Pressure	Not applicable
Water Solubility	Insoluble
Partition coefficient	No data available
Viscosity	No data available
Specific Gravity	No data available
Oxidizing Properties	None
Decomposition Temperature	> 320 °C
Flash Point	Not applicable. Product/Substance is inorganic.
pH:	+/- 10 (10% H ₂ O)
Melting point / Freezing point	Not applicable
Melting point / Freezing point	Decomposes at > 320 °C
Initial boiling point and boiling range	Not applicable
Vapor Density	Not applicable
Relative Density	2.4 g/cm ³ , 20° C
Solubility in other solvents	No data available
Kinematic viscosity	Not applicable : Solid
Dynamic viscosity	Not applicable : Solid

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Other information: No data available

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	None known
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	None known

11. TOXICOLOGICAL INFORMATION

General Information Users are advised to consider national Occupational Exposure Limits or other equivalent values.

Information on Likely Routes of Exposure

Aspiration hazard Based on available data, the classification criteria are not met.

11.1. Information on toxicological effects

Magnesium hydroxide

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

Surface modified magnesium hydroxide with substituted silane

Oral LD50 8 mL/kg Rat

Specific target organ toxicity - Single exposure No information available.

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Specific target organ toxicity - Repeated exposure No information available.

12. ECOLOGICAL INFORMATION

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)

Ecotoxicity Based on available data, the classification criteria are not met

Persistence and degradability No data available

Bioaccumulation No data available.

Mobility in soil No data available

Hazardous to the ozone layer No data available

13. DISPOSAL CONSIDERATIONS

Disposal Dispose of in accordance with federal, state and local regulations

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal

14. TRANSPORT INFORMATION

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

ADR	Not regulated
RID	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

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15. REGULATORY INFORMATION

Occupational Safety and Health Act Not regulated

Poisonous and Deleterious Substances Control Act Not regulated

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Not regulated

Japanese Pollutant Release and Transfer Register - Class 1 Substance Not regulated

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule Not regulated

Global Inventories

Pure substance/mixture Mixture

Chemical Name	CAS Number	EC No	EU REACH registration number	Australia (AIC)	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	01-211948 8756-18-0 000	Y	Y	Y	(1)-386 ENCS; ISHL	KE-22716	Y	Y	Y	Y	A
Surface modified magnesium hydroxide with substituted silane	Proprietary	Proprietary	--	Y	Y	Y	Y	Y	N	Y	Y	Y	A

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

Legend-Inventories

KECL - Korean Existing and Evaluated Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

TSCA (Toxic Substances Control Act)

DSL (Domestic Substance List)

NDSL (Non-Domestic Substances List)

Japan - ISHL Notifiable Substances

ENCS - Japan Existing and New Chemical Substances

16. OTHER INFORMATION

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Prepared by	Huber Engineered Materials Global Regulatory Affairs email: regulatory.affairs@huber.com
Reason for Revision	This SDS complies with the requirements of JIS Z 7250:2010 and JIS Z 7252:2009 (Japan)
Bibliography	NITE GHS Classified list Japan Society for occupational health (2015) recommendation of allowable concentrations, etc. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value
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) GHS (Globally Harmonized System) TSCA (Toxic Substances Control Act)
Disclaimer	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

End of Safety Data Sheet