

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03
 Canadian Workplace Hazardous Material Information System (WHMIS) 2015
 Mexico NOM-018-STPS-2000; NOM-018-STPS-2015
 Globally Harmonized System (GHS)

Issue Date: 22/Jul/2019
 Print Date: 20/Jan/2021

Revision Number: 1.3
 Page 1 of 11

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

1.1. Product identifier

Product Name: MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV
Pure substance/mixture Mixture

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

Recommended Use	Flame retardant Additive
Industrial use	Production substance Production of plastics and rubber compounds Formulation flame retardant preparation Compounds used in transport industry Compounds used in electrical application Compounds used in building and construction Use in coatings, inks, paints and roofing Recycling plastics pH Regulating agent Production of corrosion inhibitors Use as corrosion inhibitor of gas turbines and boilers Production of Magnesium compounds Manufacture and formulation of pharmaceutical preparations PVC stabilizer Use in cleaning agents Use in oil field operations Use in lubricants Use in metal working fluids Use in blowing agents Use in binders and release agents Fuels Use in functional fluids Use in agrochemicals Use in water treatment chemicals Use in mining chemicals Deacidification agent for paper Polymer processing Abrasive for glass industry, ceramics and stones
Professional use	Use in coatings, inks, paints and roofing

Safety Data Sheet

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 2 of 11

Use in agrochemicals
Use in cleaning agents
Use in metal working fluids
Use in propellants
Fuels
Use in functional fluids
De-icing & anti-icing applications
Road and construction applications
Use in explosives
Use in water treatment chemicals
Polymer processing
Use in lubricants
Use in binders and release agents

Consumer use

Cosmetic additive
Use in coatings, inks, paints and roofing
Use in cleaning agents
Use in lubricants
Use in propellants
Fuels
Use in functional fluids
De-icing & anti-icing applications
Use in water treatment chemicals

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company: MARTINSWERK GmbH
Kölner Strasse 110
50127 Bergheim
Germany
Tel. : +49-2271-90.22.78
Fax. : +49-2271-90.27.17

Internet www.hubermaterials.com

E-mail hubermaterials@huber.com

1.4. Emergency telephone number CHEMTREC: +1 800 424 9300 or International +1 703 527 3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Physical Hazards	Not classified
Health Hazards	Not classified
Environmental Hazard	Not classified

2.2. Label elements

HUBER

Safety Data Sheet

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 3 of 11

Symbols/Pictograms None

Signal Word None

Hazard Statements None

Precautionary Statements

Prevention Do not handle until all safety precautions have been read and understood
Employ good industrial hygiene practice
Do not breathe dust
Wear protective gloves/protective clothing/eye protection/face protection

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF ON SKIN: Wash with plenty of soap and water

Storage Store away from incompatible materials
Keep in a dry place

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

Hazards not otherwise classified None known.
(HNOC)

SECTION 3: Composition/information on ingredients

Pure substance/mixture Mixture

Chemical Name	CAS Number	TSCA: United States	Canada (DSL)	Mexico	REACH registration number	OSHA Regulatory Status	WHMIS	Weight-%
Magnesium hydroxide	1309-42-8	A	Y	Y	01-211948875 6-18-0000	Not classified	--	>=97

Legend

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General Advice When in doubt or if symptoms are observed, get medical advice. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Eye Contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Safety Data Sheet

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 4 of 11

Skin Contact	Wash with plenty of soap and water.
Ingestion	Rinse mouth thoroughly with water.
Inhalation	Do not breathe dust. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
Aspiration hazard	Based on available data, the classification criteria are not met.
4.2. Most important symptoms and effects, both acute and delayed	Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.
4.3. Indication of any immediate medical attention and special treatment needed	Treat symptomatically. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing agent suitable for type of surrounding fire. Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media

Do not use water jetstream.

5.2. Special hazards arising from the substance or mixture

Non-combustible.

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Fire-fighting measures

Water mist may be used to cool closed containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Ensure adequate ventilation. Use personal protection recommended in Section 8. Keep unauthorized personnel away.

Safety Data Sheet

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 5 of 11

For non-emergency personnel Keep unauthorized personnel away.

For emergency responders Keep unauthorized personnel away. Use personal protection recommended in Section 8.

6.2. Environmental precautions Avoid runoff to waterways and sewers.

6.3. 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

6.4. Reference to other sections Section 8: Exposure controls and personal protection. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Do not breathe dust. Ensure adequate ventilation. Wear appropriate personal protective clothing to prevent skin contact. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities Keep container tightly closed and dry. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Magnesium hydroxide - 1309-42-8

OSHA	TWA: Not established
ACGIH	STEL: Not established
NIOSH	TWA: Not established

Predicted No Effect Concentration (PNEC) No information available

Derived No Effect Level (DNEL) No information available

Biological Limit Values: No information available

8.2. Exposure controls

Engineering Measures Provide a good standard of controlled ventilation (5 to 10 air changes per hour).

Safety Data Sheet

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 6 of 11

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

Personal protective equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear suitable protective clothing.
Hand Protection	For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.
Respiratory Protection	In case of inadequate ventilation wear respiratory protection.
Thermal hazards	None known. Wear suitable protective clothing.
Hygiene Measures	No information available.
Environmental Exposure Controls	Dispose of in accordance with local regulations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical State	Solid Powder
Color	White
Odor	Odorless
Odor Threshold	No information available
pH:	+/- 10 (10% H ₂ O)
Melting point / Freezing point	Not applicable 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:	
Lower flammability limit:	
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Relative Density	2.4 g/cm ³ , 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

10.1. Reactivity	Stable under normal conditions
10.2. Chemical stability	Stable under normal conditions
10.3. Possibility of hazardous reactions	No specific hazard known
10.4. Conditions to avoid	Decomposition Temperature < / =0.3% : MgO, H ₂ O
10.5. Incompatible materials	None known
10.6. Hazardous decomposition products	None known

SECTION 11: Toxicological information

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

Information on Likely Routes of Exposure

Inhalation	Avoid inhalation of the product
Skin	Prolonged or repeated contact may dry skin and cause irritation
Eyes	Dust contact with the eyes can lead to mechanical irritation
Ingestion	Ingestion is not a likely route 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

Specific target organ toxicity - Single exposure	No information available.
---	---------------------------

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 8 of 11

Specific target organ toxicity - Repeated exposure Not classified.

SECTION 12: Ecological information

12.1. Ecotoxicity Not classified.

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)
WGK Classification (AwSV)	5209. WGK: nwg

12.2. Persistence and degradability No data available.

12.3. Bioaccumulative potential No data available.

Partition coefficient Not applicable Product/Substance is inorganic

Bioconcentration factor (BCF) 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 information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Contaminated Packaging Product residue may remain in empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste codes Waste codes should be assigned by the user based on the application for which the product was used

Magnesium hydroxide

HUBER

Safety Data Sheet

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 9 of 11

WGK Classification (AwSV) 5209. WGK: nwg

SECTION 14: Transport information

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

TDG -Canada	Not regulated
DOT	Not regulated
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

SECTION 15: Regulatory information

Global Inventories

Pure substance/mixture Mixture

Chemical Name	CAS Number	EC No	REACH registration number	Australia (AICS)	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

Legend

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

US Federal Regulations

HUBER

Safety Data Sheet

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 10 of 11

EPA

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

U.S. State Right-to-Know Regulations

Chemical Name	CAS Number	California Proposition 65	Massachusetts	Minnesota	New Jersey	Pennsylvania
Magnesium hydroxide	1309-42-8	N	N	N	N	N

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any Proposition 65 chemicals

CANADA

WHMIS:

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

SECTION 16: Other information

Prepared by	Huber Engineered Materials (HEM) Global Regulatory Affairs regulatory.affairs@huber.com
Issue Date:	22/Jul/2019
Print Date:	20/Jan/2021
Revision Number:	1.3
Reason for Version	OSHA (Occupational Safety and Health Administration of the US Department of Labor).
Training Advice	Do not handle until all safety precautions have been read and understood.
Abbreviations and acronyms	International Agency for Research on Cancer (IARC) International Air Transport Association (IATA) International Maritime Dangerous Goods (IMDG) International Uniform Chemical Information Database (IUCLID) Workplace Hazardous Materials Information System (WHMIS) status and classification EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification DOT (Department of Transportation) OSHA (Occupational Safety and Health Administration of the US Department of Labor) TWA - Time-Weighted Average Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008) PPE - Personal Protection Equipment NIOSH - National Institute for Occupational Safety and Health

HUBER

Safety Data Sheet

MAGNIFIN® H-5 IV; MAGNIFIN® H-10 IV

Issue Date: 22/Jul/2019
Print Date: 20/Jan/2021

Revision Number: 1.3
Page 11 of 11

TDG (Transport of Dangerous Goods) Canada
CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)
Reportable Quantity (RQ) (RQ/% in mixture)
STEL - Short Term Exposure Limit
TLV® - Threshold Limit Value
Derived No Effect Level (DNEL)
SVHC: Substances of Very High Concern for Authorization:
Land transport (ADR/RID)
Biochemical oxygen demand (BOD)
Chemical oxygen demand (COD)
ICAO (air)
(IMDG) International Maritime Dangerous Goods
Positive Pressure Self-Contained Breathing Apparatus (SCBA)
Predicted No Effect Concentration (PNEC)
Globally Harmonized System (GHS)

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