SAFETY DATA SHEET

Date: February 28, 2020

1. PRODUCT INFORMATION

Product name	: Magnesium Hydroxide
INCI	: Magnesium hydroxide
CAS No	: 1309-42-8
Country of Origin	: United States
Use of substance	: For use in industrial applications such as industrial & municipal wastewater treatment & silica removal.
Supplier	: Windy Point Soap Making Supplies Inc.
Address	: 14, 6125-12th Street SE, Calgary, AB T2H 2K1
Telephone	: 587-318-6678
Emergency Telephone	: (800) 225-3924 Canada, USA, Puerto Rico

2. HAZARDS IDENTIFICATION

Classification (GHS-US)

Not classified

Label elements

GHS-US labeling

No labelling applicable.

Other Hazards

No data available.

3. COMPOSITION / INFORMATION INGREDIENTS

Name	Product identifier	%	Classification (GHS-US)
Magnesium hydroxide	CAS# 1309-42-8	98.5	Not classified
Oxides of silicon, iron, aluminum and calcium	CAS# Mixture	1	Not classified
Inorganic chloride salts	CAS# Mixture	0.3	Not classified
Inorganic silicates and carbonates	CAS# Mixture	0.2	Not classified

4. FIRST AID MEASURES

First aid measures general

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Eye contact

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

Skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

Ingestion

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries

Not expected to be a significant hazard under anticipated conditions of normal use. Do not breathe dust.

Inhalation

Inhalation may cause irritation, cough, short breathing.

Skin contact

Effects of skin contact may include skin irritation.

Eye contact

May cause eye irritation.

Indication of any immediate medical attention and special treatment needed

No additional medical information found. If you feel unwell, seek medical advice.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible. If there is a fire close by, use suitable extinguishing agents. Water fog. Carbon dioxide. Dry powder. Foam.

Unsuitable Extinguishing Media:

None known.

Fire hazard

If heated to point of decomposition (>360°C), magnesium oxide & water are formed. If heated to point of volatization (i.e. >1700°C), magnesium oxide fumes may be generated.

Explosion hazard

Product is not explosive.

Reactivity

Reacts with: Incompatible materials.

Advice for fire fighters

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

Do not enter fire area without proper protective equipment, including respiratory protection.

No additional risk management measures required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid creating or spreading dust. Dust deposited may be vacuum cleaned. Where excessive dust may result, use approved respiratory protection equipment. Evacuate unnecessary personnel.

Emergency responders

Where excessive dust may result, use approved respiratory protection equipment.

Ventilate area. If a major spill occurs, all personnel should be immediately evacuated, and the area ventilated.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and materials for containment and cleaning up

Do not allow minor leaks or spills to accumulate on walking surfaces. Contain and collect as any solid.

On land, sweep or shovel into suitable containers. Minimize generation of dust.

7. HANDLING AND STORAGE

Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.;Provide good ventilation in process area to prevent formation of dust.

Conditions for safe storage

Store in a cool, dry and ventilated area away from heat sources and protected from light in tightly closed original container. Avoid plastic and uncoated metal container. Keep air contact to a minimum.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Appropriate engineering controls

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Provide local exhaust ventilation of closed transfer systems to minimize exposures.

Hand protection

Wear protective gloves: dust impervious gloves.

Eye protection

Chemical goggles or safety glasses with side guards to prevent eye contact.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.; Use air-purifying respirator equipped with particulate filtering cartridges.

Up to 10 mg/m3

(APF = 25) Any supplied-air respirator operated in a continuous-flow mode

(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100 or P100 filter

(APF = 25) Any powered, air-purifying respirator with a high-efficiency particulate filter

(APF = 50) Any self-contained breathing apparatus with a full facepiece

(APF = 50) Any supplied-air respirator with a full facepiece

Emergency or planned entry into unknown concentrations or IDLH conditions:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure demand or other positive-pressure mode in combination with an auxiliary self-contained positive pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.

Other information

When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Solid
Appearance	: Powder
Colour	: White
Odour	:Odourless
Odour threshold	: No data available
pH	: No data available
pH solution	: > 10
Relative evaporation rate (butyl acetate =1	: No data available
Melting point	: 350°C decomposes
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: Does not self-ignite
Decomposition temperature	: > 350 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Density	: 2.36 g/cm³
Solubility	: Water: 6.9 mg/l
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive
Oxidizing properties	: No oxidizing properties

Explosive limits : No data available

10. STABILITY AND REACTIVITY

Reactivity

Incompatible materials.

Chemical stability

Stable at ambient temperature and under normal conditions of use.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to avoid

Avoid contact with incompatible materials, excessive heat or cold; moisture.

Incompatible materials

Acid (Strong) - vigorous reaction, heat generated; Maleic Anhydride - Alkali & other alkaline earth compounds including magnesium compounds, will cause explosive decomposition of maleic anhydride; Phosphorus - Phosphorus boiled w/ alkaline hydroxides yields mixed phosphines which may ignite spontaneously with air.

Hazardous decomposition products

If heated to point of decomposition (>350 °C), it forms magnesium oxide & water. If heated to point of volatilization (ie >1700°C) magnesium oxide fumes may be generated.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified. (Based on available data, the classification criteria are not met)

Acute toxicity - Oral - (Rat) mg/kg	>2000 mg/kg OECD Guideline 423
Acute toxicity - Inhalation - (Rat) mg/L/4hr	>2.1 ml/m3 OECD Guideline 403. No mortality seen at this level
Skin corrosion / irritation	Not classified. (Based on available data, the classification criteria are not met)
Serious eye damage / irritation	Not classified. (Based on available data, the classification criteria are not met)
Respiratory sensitization	Not classified. (Based on available data, the classification criteria are not met)
Skin sensitization	Not classified. (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	Not classified. (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified. (Based on available data, the classification criteria

	are not met)
IARC group	Not listed in carcinogenicity class
National Toxicology Program (NTP) Status	Not listed in carcinogenicity class
Reproductive toxicity	Not classified. (Based on available data, the classification criteria are not met)
Specific target organ toxicity - single exposure	Not classified. (Based on available data, the classification criteria are not met)
Specific target organ toxicity - repeated exposure	Not classified. (Based on available data, the classification criteria are not met)
Aspiration hazard	Not classified. (Based on available data, the classification criteria are not met)
Potential Adverse human health effects and symptoms	
Symptoms/injuries after inhalation	Inhalation may cause irritation, cough, shortness of breath.
Symptoms/injuries after skin contact	Effects of skin contact may include skin irritation.
Symptoms/injuries after eye contact	May cause eye irritation.
Likely routes of exposure	dermal; Inhalation.

12. ECOLOGICAL INFORMATION

LC50 fish 1	1293 mg/l Onchorinchus mykiss
EC50 Daphnia 1	284.76 mg/l
LC50 fish 2	511.31 mg/l P. promelas
ErC50 (algae)	> 100 mg/l

Persistence and degradability

Not readily biodegradable.

Does not degrade although it does dissolve.

Bioaccumulative potential

No additional information available.

Mobility in soil

No additional information available.

Other adverse effects

Avoid release to the environment.

13. DISPOSAL CONSIDERATION

Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems. Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.

14. TRANSPORT INFORMATION

In accordance with DOT

Not considered a dangerous good for transport regulations.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

15. REGULATORY INFORMATION

US Federal regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory

International regulations

Jurisdiction	List	Comment
Asia Pacific	Asia - PAC	
Australia	Australian Inventory of Chemical Substances (AICS)	
China	Inventory of Existing Chemical Substances (IECSC)	
Japan	Existing and New Chemical Substances (ENCS)	# 1-386; inorganic compounds
Korea	KECI (Chemical Inventory of Korea)	KE-22716
New Zealand	Inventory of Chemicals (NZIoC)	HSNO approval
Phillippines	Inventory of Chemicals and Chemical Substances (PICCS)	
Europe	EEC International Cosmetics Ingredients Inventory (INCI)	absorbant/ buffering
	EU REACH pre-registered	
	EU REACH pre-registered	
	EU Inventory of Existing Commercial Chemical Substances	215-171-9

	(EINECS)	
	German Water Hazard Class Substance List	Classification: VwVwS
	Switzerland Giftliste 1 (List of Toxic Substances)	G-8166 Toxic Category 4
Canada	Canadian Domesticated Substances List (DSL)	
North American	DOT Coast Guard Bulk Hazardous Materials	
	EPA Pesticide Inert Ingredients (PII)	
	FDA Food Substances Generally Regcognized as Safe (GRAS)	
	FDA Priority-based Assessment of Food Additives (PAFA)	
	High Production Volume Chemicals (HPV)	
	OSHA Permissible Exposure Limits	8 hour TWA: total particulates 15 mg/ m3
	Toxic Substances Control Act (TSCA) Inventory	
	Toxic Inventory Update Rule (IUR)	
	TSCA Section 8A-Preliminary Assessment Information Rule (PAIR)	
	High Production Volume Chemicals: ICCA	
	High Production Volume Chemicals: OECD	

US State regulations

Not Listed

16. OTHER INFORMATION

DISCLAIMER AND CAUTION

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