

Section 1: Substance/Preparation and Manufacturer/Supplier Identification

Product Identifier: Phodine

Relevant Use: Neutralising agent for sewer and waste water odour and corrosion control

Manufacturer/supplier:

Grenof Pty Ltd ABN: 17166936894

Physical Address: Riparian Plaza -71 Eagle Street Brisbane Queensland, 4001

Postal: GPO Box 1936, Brisbane QLD 4001

Head Office: 1300 002 889 (Specialist Advice), 1800 088 883 (Sales)

Email: admin@grenof.com

Product Name: Phodine

Chemical Name: Formulated Magnesium Hydroxide Liquid

Formula: $Mg(OH)_2$

Emergency Information:

Poison Information Centre (Australia): 131 126 National Poisons Centre (New Zealand): 0800 POISON (0800 764 766)

Section 2: Hazard Identification

Classification of the substance or mixture

Work Health and Safety Regulation 2011

This product is classified as NOT Hazardous in accordance with SafeWork Australia criteria.

Section 3: Composition of Substance

Substance

Not applicable, this product is a mixture

Mixture

Synonyms Magnesium Hydroxide Liquid, MHL, Magnesium Hydroxide Slurry

Formula Mg(OH)₂ Chemical nature Mixture

Information on Components and Impurities

Chemical Name	CAS-No	GHS Classification	Concentration (%)
Magnesium Hydroxide	1309-42-8	Non-Hazardous	30 - 40



Rheology Modifiers	Various	Non-Hazardous	< 5
Water	7732-18-5	Non-Hazardous	Balance

^{* (}Ingredients present at non-hazardous concentrations, according to criteria of SWAC (Australia) based on available information).

Section 4: First-Aid Measures

Description of First aid measures

Eyes

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- Seek immediate medical attention.

Inhalation

- · Move to fresh air.
- Oxygen or artificial respiration if needed.
- Patient to lie down in the recovery position, cover and keep them warm.
- Call a physician immediately.

Skin

- Take off contaminated clothing and shoes immediately.
- · Wash off immediately with plenty of water.
- Seek medical attention in the case of skin irritation.
- Wash contaminated clothing before re-use.

Ingestion

- Do NOT induce vomiting
- Seek medical attention

Section 5: Firefighting Measures

Extinguishing media

This product will not burn, and will not fuel a fire in progress. Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress providing fire fighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

- Use extinguishing measures that are appropriate to local circumstances and surrounding environment.
- Water
- Water spray or fine mist spray

Unsuitable extinguishing media

None



Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

- Advice for non-emergency personnel
 - o Evacuate personnel to safe areas
- Advice for emergency responders
 - Use personal protective equipment
 - Prevent further leakage or spillage
 - Keep away from incompatible products

Environmental precautions

- Prevent product from entering drains and waterways.
- Surface water can be flushed into sanitary sewer system.
- In case of accidental release or spill, immediately notify the appropriate authorities if Regulated by Federal, State/Provincial and local laws and regulations.

Methods and materials for containment and cleaning up.

- Dam up
- Recover by pumping or suitable absorbent material
- Do not let product enter drains.
- Keep in suitable, closed containers for disposal
- Keep in properly labelled containers

Reference to other sections

Refer to protective measures in sections 7 and 8.

Section 7: Handling and Storage

Precautions for safe handling

- This product is not combustible and will not burn.
- The product may induce a slight irritation to the skin or eyes with prolonged use.
- Employ standard industrial hygiene practices when handling this product.

Hygiene measures

- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Store in original container.
- Keep tightly closed in a dry and cool place.
- Keep in properly labelled containers.
- Keep in a bunded area.
- Keep away from incompatible products.



Incompatible Materials

- Brass
- Acids
- Strong oxidisers

Specific end use(s)

· Contact your supplier for additional information

Section 8: Exposure Controls

National Exposure Standards:

The time weighted average concentration (TWA) for this product is: None specified. Consider 5 g/m³, which means the highest allowable exposure concentration in an eight-hour day for a five-day working week.

The short-term exposure limit (STEL) is: None specified

Consider 5 g/m³, which is the maximum allowable exposure concentration at any time.

Replacing a TWA or STEL value for some products is a Peak Limitation value (Peak): None applies in this case.

In addition to the exposure concentrations may be a subsidiary caution in such cases where the product is a skin sensitiser, represented as (Sen), where none applies in this case.

Control measures

Engineering measures

- The use of local exhaust ventilation is recommended to control process emissions near the source. Provide mechanical ventilation of confined spaces.
- Apply technical measures to comply with the occupational exposure limits.

Personal Protective Equipment (PPE):

Respiratory Protection

 Where concentrations in air may approach, or exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type 'A' filter material is considered suitable for this product.

Hand protection

· Chemical resistant gloves

Suitable material

- Butyl-rubber
- Break through time: > 480 min
- Glove thickness: >= 0.4 mm

Eye protection

Always use safety glasses or a face shield when handling this product.



Skin and body protection

 Always wear long sleeves, long trousers, or coveralls, and enclosed footwear or safety boots when handling this product.

Hygiene measures

- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls:

• Dispose of rinse water in accordance with local and national regulations.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Form: Slurry Physical State: Liquid Colour: White / Grey Milky	
Odour	Slight alkaline or chalky smell	
Odour Threshold	No data available	
pH, 1% aq. solution	9.5 – 11.0	
Freezing point	0 °C	
Boiling Point / Boiling range	ca. 101 °C	
Flashpoint	None	
Evaporation rate	No data available	
Flammability (Liquids)	Not applicable	
Flammability / Explosive Limit	Not explosive	
Auto-ignition temperature	No data available	
Vapour pressure, 20°C	No data available	
Vapour density, 20°C	No data available	
Density, g/ml	1.18 – 1.35	
Solubility	Water: Miscible with water Other Solvents: None	
Viscosity, cPs at 23°C	200 - 1000	
Explosive properties	Not Explosive	
Oxidizing properties	Non-Oxidising	
Corrosion of Metals	Corrosive to Brass	



Section 10: Stability and Reactivity

Reactivity

· Reactive with acids

Chemical stability

• Stable under recommended storage conditions.

Possibility of hazardous reactions

None

Conditions to avoid

• Strong acids, Maleic Anhydride.

Incompatible materials

Acids

Hazardous decomposition products

· Oxides of Calcium, Magnesium and Silicon

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

- **Ingestion** This material may cause discomfort on swallowing. Ingestion of large amounts may result in gastric disturbances, irritation to the oesophagus, throat and stomach.
- **Eye Contact** Eye contact with this product will cause redness, may induce some swelling and blurred vision.
- **Skin Contact** Contact with skin will result in mild irritations. Some defatting, itching and redness is likely in these situations.
- **Inhalation** This material has low vapour concentrations at ambient temperatures. Inhalation of mists will result in nausea and headaches and can result in lung damage.

Chronic toxicity

 Persons with pre-existing skin or respiratory conditions may be sensitive to this product. If PPE precautions are observed, there is little likelihood of overt health effects.

Toxicological Information

- Oral LD₅₀: > 2000 mg/kg (rat)
- Dermal LD₅₀: No data available

SECTION 12: Ecological Information

Toxicity

Aquatic Compartment

Acute toxicity to fish

Avoid contaminating waterways



Persistence and degradability

Elements of this product are expected to persist.

Mobility in soil

This product is mobile on dilution with water and, if released to the environment, likely to contaminate

SECTION 13: Disposal Considerations

Waste treatment methods

Product Disposal

- Contact manufacturer.
- Contact waste disposal services.
- In accordance with local and national regulations.
- This product is suitable for disposal by either landfill or via municipal sewers.

Advice on cleaning and disposal of packaging

- Empty containers.
- · Clean container with water.
- Dispose of rinse water in accordance with local and national regulations.
- Where possible recycling is preferred to disposal or incineration.
- In accordance with local and national regulations.

SECTION 14: Transport Information

Road and Rail transport - ADG (Australia)

This product is not regulated for transport by road and rail

	Road & Rail	Marine	Air
UN No.	Not Regulated	Not Regulated	Not Regulated
Proper Shipping Name	Phodine	Phodine	Phodine
DG Class	Not Regulated	Not Regulated	Not Regulated
Sub Risk	None	None	None
Packing group	Not Regulated	Not Regulated	Not Regulated
Hazchem	Not Regulated	Not Regulated	Not Regulated



SECTION 15: Regulatory Information

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

Poison Schedule (SUSMP Australia) None

Notification status

Inventory Information	Status		
United States TSCA Inventory	Listed on Inventory		
Canadian Domestic Substances List (DSL)	Listed on Inventory		
Mexico INSQ (INSQ)	Listed on Inventory		
New Zealand. Inventory of Chemical Substances	Listed on Inventory		
Australia Inventory of Chemical Substances (AICS)	Listed on Inventory		
Japan. CSCL - Inventory of Existing and New Chemical Substances	Listed on Inventory		
Korea. Korean Existing Chemicals Inventory (KECI)	Listed on Inventory		
China. Inventory of Existing Chemical Substances in China (IECSC)	Listed on Inventory		
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed on Inventory		
EU. European Registration, Evaluation, Authorisation and Restriction of Chemical (REACH)	If product is purchased from Grenof in Europe it is in compliance with REACH, if not please contact the supplier.		



SECTION 16: Other Information

Key or legend to abbreviations and acronyms used in the safety data sheet

STEL Exposure standard - short term exposure limit

TWA Exposure standard - time weighted average

ca. approximately

Further information

This sheet was updated (refer to the date at the bottom of this page).

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. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.