

(prepared in accordance with Annex II of the REACH Regulation (EC) 1907/2006)

Safety Data Sheet
Premier ECOMAG
Magnesium Hydroxide Suspension

1. Identification of the Substance / Preparation and of the Company / Undertaking

- 1.1 Identification of substance:** Premier **ECOMAG**.
- Other names:**
- Chemical identity:** Magnesium Hydroxide (Mg(OH)₂ suspension in water.
- Identification / registration numbers:** CAS: 1309-42-8
EINECS: 215-170-3
- 1.2 Use of the substance:** Neutralisation, pH adjustment and metal removal from waste water streams.
- 1.3 Company / Undertaking identification** Premier Periclase Limited
Boyne Road
Drogheda
County Louth
Ireland.
Telephone: (+353) 41 98 70700
- Issued By:** Patrick McCleery
pmccleery@premierpericlase.ie
- 1.4 Emergency telephone:** (+353) 41 98 70700 (Normal Office Hours)

2. Hazards Identification

The material is classified as non-hazardous. Suspension may be slightly irritating to the skin, eyes and nose.

3. Composition / Information on Ingredients

- 3.1 Composition** 35%-45% (approx.) Magnesium Hydroxide
Mg(OH)₂ (CAS: 1309-42-8, EINECS: 215-170-3) in water.
- 3.2 Hazardous Ingredients:** None
- 3.3 Classification Symbol** Not Applicable

4. First-aid Measures

If medical advice is required, bring this SDS with you.

- 4.1 General Information:** Magnesium Hydroxide is not listed as a hazardous or noxious substance. The product is medium alkaline (pH 11.0), therefore if in contact with the skin it should be washed off immediately. It is recommended to handle all chemicals with due care.
- 4.2 Skin contact:** The product is not absorbed through the skin therefore it is not significantly hazardous upon skin contact. It is capable of causing minor skin irritation at most. If irritation occurs, wash gently and thoroughly with water and non-abrasive soap.
- 4.3 Eye contact:** Other than possible mechanical irritation no adverse effects are expected. If irritation occurs, flush the contaminated eye(s) with lukewarm, gently flowing water until particles have been removed. If irritation persists, obtain medical advice.
- 4.4 Ingestion:** The product is low in single dose oral toxicity. If ingestion occurs, rinse mouth with water and drink some water. Deliberate ingestion of large quantities can cause abdominal cramps, diarrhoea or bowel obstruction. In such an instance obtain medical advice.

5. Fire-fighting Measures

The product is non-flammable and is not an explosion hazard.

- 5.1 Suitable extinguishing media:** As for surrounding fire.
- 5.2 Unsuitable extinguishing media:** None known.
- 5.3 Special exposure hazards:** None known.
- 5.4 Special protective equipment for fire-fighters:** None.

6. Accidental Release Measures

- 6.1 Precautions:** No special precautions required.
- 6.2 Clean-up:** Small spillages can be collected or soaked up with absorbant cloth or paper. The suspension should not be allowed enter public sewer or water courses. Alternatively where there is no risk to water courses, spillages can be allowed dry out and swept-up or vacuumed. Reclaim product for reuse or dispose of in an appropriate manner subject to local waste disposal regulations. For larger spillages, see Section 13.
Wash contaminated clothing to avoid possible irritation.

7. Handling and Storage

- 7.1 Handling:** Product is in the form off-white suspension. Gloves and eye protection should be worn.
- 7.2 Storage:** Good housekeeping is important. Keep away from incompatible materials such as strong acids and interhalogens.

8. Exposure Controls / Personal Protection**8.1 Occupational Exposure Limit Values:** None**8.2 Exposure Controls****Respiratory Protection:** Not required. If product is allowed dry out, dust may be generated requiring local exhaust ventilation or extraction (with appropriate filtration) to control airborne dust.**Hand Protection:** No specific requirement but it is good practice to wear gloves appropriate for water miscible weak alkalis when handling the material.**Eye Protection:** No specific requirement but it is good practice to wear safety glasses when handling the material.**Skin Protection:** Not specifically required, but it is good practice to adopt appropriate cleanliness after handling the material.**Environmental Exposure controls:**

The material is classified as non-hazardous. However users should abide by local environmental regulations in relation to air and water emissions. Disposal should comply with local disposal and waste regulations.

9. Physical and Chemical Properties

9.1 Form:	Milky suspension.
9.2 Colour:	Off-white
9.3 Odour:	Slight marine odour.
9.4 pH Value:	10.5 – 11.0 (Method 10% in water).
9.5 Melting point:	Not Applicable
9.6 Boiling point:	100°C (water component)
9.7 Flash point:	Not applicable
9.8 Flammability:	Not flammable
9.9 Auto flammability:	Not applicable
9.10 Explosive properties:	Not explosive
9.11 Oxidising properties:	Not an oxidising agent
9.12 Vapour Pressure:	15.5 mm Hg. at 18°C (water component)
9.13 Relative Density:	~1.4 kg./lit.
9.14 Solubility:	Water: 0.8×10^{-2} g/lit. Fat: Not Applicable
9.15 Partition Coefficient:	Not Applicable
9.16 Further Data:	Thermal Decomposition: Begins to decompose at approximately 350°C to Magnesium Oxide and water. No hazardous decomposition products are formed.
9.17 Median Particle Size	~ 2.5 micron

10. Stability and Reactivity

Stable under normal conditions of use and storage.

- 10.1 Conditions to Avoid:** High Temperatures (Decomposition, see 9.15).
Storage next to acids or interhalogens.
- 10.2 Materials to Avoid:** Reacts violently with Phosphorous and Maleic Anhydride. May react exothermically with acids.
- 10.3 Hazardous Decomposition Products:** None.

11. Toxicological Information

Magnesium hydroxide is not listed as a hazardous or noxious substance. It is not classified in the Annex I of Directive 67/548/EEC and is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances).

- 11.1 Acute Toxicity Data:
- | | |
|------------|--|
| 2747 mg/kg | Lowest published toxic dose of magnesium hydroxide; human infant, oral exposure, general depressed activity.
(Source: RTECS.) |
| 8500 mg/kg | LD50; rat, oral exposure. Details of toxic effects not reported.
(Source: RTECS.) |
| 2780 mg/kg | LD50; rat, intraperitoneal exposure. Details of toxic effects not reported.
(Source: RTECS.) |
| 8500 mg/kg | LD50; mouse, oral exposure. Details of toxic effects not reported.
(Sources: IUCLID, RTECS.) |
| 815 mg/kg | LD50; mouse, intraperitoneal exposure. Details of toxic effects not reported.
(Source: RTECS.) |

12. Ecological Information

This product is made from naturally occurring substances that are low in toxicity and should present no unusual hazards to the environment. There is no data currently available on ecotoxicity, mobility, persistence or bioaccumulative potential. Users of the product should abide by all local, national and other laws and regulations concerning air and water discharges.

13. Disposal Considerations

Dispose of in accordance with national and local authority regulations at an approved disposal site. Disposal to authorised landfill may be acceptable.

14. Transport Considerations

No restrictions. Magnesium Hydroxide is not classed as hazardous for conveyance or supply under EU or UN regulations.

15. Regulatory Information

Issued in accordance with the Safety, Health and Welfare at Work Regulations (Chemical Agents) Regulations 2001. SI 619 of 2001. Safety Data Sheet prepared according to Regulation (EC) 1907/2006 (**REACH Regulations**) replacing Commission Directive 91/155/EEC.

Classified as not hazardous.

This safety data sheet does not constitute the user's own assessment of workplace risk. Prior to working with this substance, a full risk assessment as required by the above Regulations should be conducted.

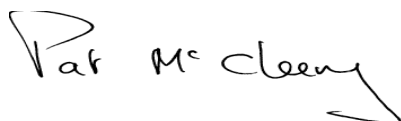
16. Other Information

It is recommended that users ensure that the information contained in the safety data sheet is brought to the attention of their employees and others handling this product. Distributors of this product are advised to forward this document to their customers.

The information contained in this Material Safety Data Sheet is believed to be reliable. No guarantee is implied or expressed regarding the accuracy of this information or the use of the product since the conditions of use are beyond our control.

Sources of data used to compile this Safety Data Sheet:

ESIS (European chemical Substances Information System)
RTECS (Registry of Toxic Effects of Chemical Substances)
HSDB (Hazardous Substances Data Bank)
EH40/2005 Workplace Exposure Limits, UK Health and Safety Executive



Patrick McCleery
Premier Periclase Limited