



SAFETY DATA SHEET

Issue Date 01-Dec-2014

Revision Date 19-Aug-2014

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name THIOGUARD®

Other means of identification

Product Code THIOGUARD®

Synonyms Magnesium Oxide, Magnesium Hydroxide, Calcium Hydroxide (synonym- Hydrated Lime).
Mag Hydroxide Hydrated Magnesia, Mg(OH)₂

Recommended use of the chemical and restrictions on use

Recommended Use Waste water treatment. Hydrogen sulfide control.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Premier Magnesia, LLC, 300 Barr Harbor Drive, Suite 250, West Conshohocken, PA 19428

Emergency telephone number

Company Phone Number 610-828-6929

24 Hour Emergency Phone Number Chemtrec 1-800-424-9300

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

Not hazardous in normal industrial use. Dust from dried product slurry is classified as a "nuisance particulate, not otherwise regulated" as specified by ACGIH and OSHA.

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Emergency Overview

White to off-white aqueous slurry. Not toxic in normal industrial use. Dust is classified as a "nuisance particulate not otherwise regulated" as specified by ACGIH and OSHA. Do not store in drums or tanks constructed of aluminum! See section 7.

Appearance Slurry

Physical state Liquid

Odor Odorless

Particulate may cause eye irritation

Low toxicity by skin contact.

Ingestion is an unlikely route of exposure. If ingested in large amounts it may cause irritation, nausea, vomiting, diarrhea, abdominal pain, black stool, pink urine, coma and possibly death.

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common name Magnesium Hydroxide #1309-42-8.
Synonyms Magnesium Oxide, Magnesium Hydroxide, Calcium Hydroxide (synonym- Hydrated Lime).
 Mag Hydroxide Hydrated Magnesia, Mg(OH)₂

Formula #1 Mg(OH)₂

Chemical Name	CAS No.	Weight-%	Trade Secret
Water	7732-18-5	39-47	
Magnesium Hydroxide	1309-42-8	53-61	

4. FIRST AID MEASURES

First aid measures

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists: Get medical advice/attention.

Skin Contact Wash skin with soap and water.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Ingestion Ingestion is an unlikely route of exposure. If ingested in sufficient quantity and victim is conscious, give 1-2 glasses of water or milk. Never give anything by mouth to an unconscious person. Leave decision to induce vomiting to qualified medical personnel, since particles may be aspirated into the lungs. Seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Carefully clean up and place material into a suitable container, being careful to avoid creating excessive dust. If conditions warrant, clean up personnel should wear approved respiratory protection, gloves and goggles to prevent irritation from contact and/or inhalation.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Do not allow product to freeze. Do not store in drums or tanks constructed of aluminum!.

Incompatible materials Maleic anhydride; Aluminum metal in contact with product may produce hydrogen.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Provide sufficient ventilation, in both volume and air flow patterns to control mist/dust concentrations below allowable exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection The use of eye protection is recommended.

Skin and body protection The use of eye protection, gloves and long sleeve clothing is recommended.

Respiratory protection Provide workers with NIOSH approved respirators in accordance with requirements of 29 CFR 1910. 134 for level of exposure incurred.

General Hygiene Considerations Avoid contact with eyes, skin and clothing. After handling this product, wash hands before eating or drinking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Odorless
Appearance	Slurry	Odor threshold	No information available
Color	White to off-white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	10-11	
Melting point/freezing point	2100 °C >3800 °F	
Boiling point / boiling range	Loses free water at 100 °C ;Chemically combined water at 350°C	

Flash point	No information available	
Evaporation rate	Same as water	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	1.45	
Water solubility	No information available	Aqueous Slurry
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	12.71-13.19 lb/gal

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization	Hazardous polymerization does not occur.
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Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Maleic anhydride; Aluminum metal in contact with product may produce hydrogen.

Hazardous Decomposition Products

Heat and steam.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Magnesium Hydroxide 1309-42-8	= 8500 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation May cause eye irritation.
Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available on any adverse effects of this material on the environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

This produce does not exhibit any characteristics of a hazardous waste. The product is suitable for landfill disposal once the free water component is evaporated or absorbed by a suitable absorbent (earth). Follow all applicable federal, state and local regulations for safe disposal.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

Note:

WARNING! Premier Magnesia, LLC prohibits this product from transportation or storage in tanks constructed of aluminum! See section 10.

DOT

Not regulated by DOT as a hazardous material. No hazard class, label or placard required, no UN or NA number assigned.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
Chemical Name	TSCA
Water	X
Magnesium Hydroxide	X

- DSL/NDSL** Complies
- EINECS/ELINCS** Complies
- ENCS** Does not comply
- IECSC** Complies
- KECL** Complies
- PICCS** Complies
- AICS** Complies

X - Listed

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

US Federal Regulations

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 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

- Acute health hazard** No
- Chronic Health Hazard** No
- Fire hazard** No
- Sudden release of pressure hazard** No
- Reactive Hazard** No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals This product does not contain chemicals known to the state of California to cause birth defects or other reproductive harm.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	Health hazards 1	Flammability 0	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Issue Date 01-Dec-2014

Revision Date 19-Aug-2014

Revision Note

No information available

Disclaimer

The information provided in this Material 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