



Bonide Hydrated Lime

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

1.1. Product identifier

Product name : Bonide Hydrated Lime
Product code : 978

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

Use of the substance/mixture : Soil Amendment

1.3. Details of the supplier of the safety data sheet

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424
T (315) 736-8231
www.bonide.com

1.4. Emergency telephone number

Emergency number : CHEMTREC - 1 (800) 424-9300 and/or 1 (703) 527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Corr. 1A H314
Carc. 1A H350

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H315 - Causes skin irritation
H318 - Causes serious eye damage
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) : P280 - Wear protective gloves/eye protection
P261 - Avoid breathing dust/spray
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P501 - Dispose of contents/container in accordance with local/national regulations
P102 - Keep out of reach of children

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

Mixture

Name	Product identifier	%	Classification (GHS-US)
Calcium Magnesium Hydroxide	(CAS No) 39445-23-3	60 - 100	Not classified
Calcium hydroxide	(CAS No) 1305-62-0	30 - 60	Skin Corr. 1A, H314
Magnesium hydroxide	(CAS No) 1309-42-8	0 - 40	Not classified
Magnesium oxide	(CAS No) 1309-48-4	0 - 40	Not classified
Crystalline Silica, Quartz	(CAS No) 14808-60-7	0 - 0.1	Carc. 1A, H350

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SECTION 4: First aid measures

4.1. Description of 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). |
| First-aid measures after inhalation | : Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately consult a doctor/medical service. |
| First-aid measures after skin contact | : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. |

4.2. Most important symptoms and effects, both acute and delayed

- | | |
|-------------------|---|
| Symptoms/injuries | : The substance is classified as irritating to skin and respiratory tract, and entails a risk of serious damage to the eye. |
|-------------------|---|

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- | | |
|--------------------------------|---|
| Suitable extinguishing media | : Foam. Dry powder. Carbon dioxide. Sand. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

- | | |
|------------|----------------------|
| Reactivity | : Reacts with acids. |
|------------|----------------------|

5.3. Advice for firefighters

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|--------------------------------|---|
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

6.1.2. For emergency responders

- | | |
|----------------------|--|
| Protective equipment | : Equip cleanup crew with proper protection. |
| Emergency procedures | : Ventilate area. |

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

- | | |
|-------------------------|--|
| Methods for cleaning up | : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials. |
|-------------------------|--|

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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|-------------------------------|--|
| Precautions for safe handling | : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe dust/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. |
| Hygiene measures | : Wash hands thoroughly after handling. |

7.2. Conditions for safe storage, including any incompatibilities

- | | |
|--------------------|--|
| Technical measures | : Comply with applicable regulations. |
| Storage conditions | : Protect from moisture. Keep container closed when not in use. Store in original container. Store in a dry place. |

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Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Calcium hydroxide (1305-62-0)		
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³
Magnesium hydroxide (1309-42-8)		
USA ACGIH	ACGIH TWA (mg/m³)	3 mg/m³
Magnesium oxide (1309-48-4)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
Crystalline Silica, Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.
Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or face shield.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Wear approved mask.
Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : White, off-white, faint musty, earthy odor.
Color : White to off-white.
Odor : Musty to earthy odor.
Odor threshold : No data available
pH : 12.454 @ 25 degrees C
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : Decomposes @ 1076 degrees F. to CaO
Flash point : No data available
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : 2.2 - 2.4
Solubility : Slightly soluble.
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with acids.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Corrosive vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Calcium hydroxide (1305-62-0)	
LD50 dermal rabbit	> 2500 mg/kg body weight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)

Magnesium hydroxide (1309-42-8)	
LD50 oral rat	8500 mg/kg (Rat; Literature study)

Magnesium oxide (1309-48-4)	
LD50 oral rat	> 5000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 2000 mg/kg body weight (Rabbit; Literature study)

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: 12.454 @ 25 degrees C

Serious eye damage/irritation : Not classified

pH: 12.454 @ 25 degrees C

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer.

Crystalline Silica, Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to Humans

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Calcium hydroxide (1305-62-0)	
LC50 fish 1	160 mg/l (96 h; Gambusia affinis; GLP)
LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h)
EC50 Daphnia 1	49.1 mg/l (48 h; Daphnia magna; GLP)

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Calcium hydroxide (1305-62-0)	
LC50 fish 2	220 mg/l (48 h; Gambusia affinis)
TLM fish 1	33.9 mg/l (96 h; Pisces)
TLM fish 2	220 ppm (48 h; Gambusia affinis)
Threshold limit other aquatic organisms 1	100 - 1000,96 h
Threshold limit algae 1	184.57 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)

12.2. Persistence and degradability

Bonide Hydrated Lime	
Persistence and degradability	Not established.

Calcium hydroxide (1305-62-0)	
Persistence and degradability	Biodegradability: not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Magnesium hydroxide (1309-42-8)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Magnesium oxide (1309-48-4)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
ThOD	Not applicable (inorganic)

Crystalline Silica, Quartz (14808-60-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Bonide Hydrated Lime	
Bioaccumulative potential	Not established.

Calcium hydroxide (1305-62-0)	
Bioaccumulative potential	Not bioaccumulative.

Magnesium hydroxide (1309-42-8)	
Bioaccumulative potential	No bioaccumulation data available.

Magnesium oxide (1309-48-4)	
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

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Additional information

Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Carc. 1A	Carcinogenicity Category 1A
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H314	Causes severe skin burns and eye damage
H350	May cause cancer

SDS US (GHS HazCom 2012) - Pesticides

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.