



VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet Hi-Yield Horticultural Hydrated Lime

SECTION 1: Identification

GHS Product identifier

Product name	Hi-Yield Horticultural Hydrated Lime
Product number	34371
Brand	Hi-Yield
Substance name	Calcium Hydroxide Ca(OH) ₂

Recommended use of the chemical and restrictions on use

Specialized soil amendment

Supplier's details

Name	Voluntary Purchasing Groups, Inc.
Address	230 FM 87 Bonham TX 75418 USA
Telephone	855-270-4776

Emergency phone number

In the event of a medical or chemical emergency contact ChemTel, Inc.
North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

SECTION 2: Hazard identification

Classification of the substance or mixture

- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 2
- Carcinogenicity, Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H318	Causes serious eye damage
H315	Causes skin irritation
H350	May cause cancer

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Precautionary statement(s)

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P264	Wash exposed skin thoroughly after handling.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.
P102	Keep out of reach of children.
P103	Read label before use.

Other hazards which do not result in classification

No data available.

Statement regarding ingredients of unknown toxicity

No data available.

SECTION 3: Composition/information on ingredients

Mixtures

Substance name: Calcium Hydroxide Ca(OH)₂

Hazardous components

Component	Concentration
Calcium hydroxide (CAS no.: 1305-62-8)	94 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Magnesium oxide	1 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Silica, crystalline (airborne particles of respirable size) (CAS no.: 14808-60-7)	1 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

Inhalation:

Acute: May cause respiratory irritation.

Chronic: Respiratory tract irritation, coughing, burning sensation.

Eyes:

Acute: Causes serious eye damage.

Chronic: Pain, watering, redness.

Skin:

Acute: Causes skin irritation.

Chronic: Pain or irritation, redness, blistering may occur.

Ingestion:

Acute: No known effects.

Chronic: Burning sensation, abdominal cramps and pain, vomiting.

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If inhaled	This product can cause severe irritation of the respiratory system. Move victim to fresh air. Seek medical attention if necessary. If breathing has stopped, give artificial respiration.
In case of skin contact	Contact can cause severe irritation or burning of skin. Wash exposed area with large amounts of soap and water. Wear the proper clothing that will provide less direct contact with the person's skin. Seek medical attention immediately.
In case of eye contact	Contact can cause severe irritation or burning of eyes, including permanent damage. Do not rub eyes and immediately flush eyes with generous amounts of water for at least 15 minutes. Pull back the eyelid to ensure that all lime dust has been washed out. Seek medical attention immediately.
If swallowed	Do not induce vomiting. Seek medical attention immediately. Never give anything by mouth unless instructed to do so by medical personnel.
Personal protective equipment for first-aid responders	Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Keep personnel away from and upwind of fire.

Most important symptoms/effects, acute and delayed

No data available.

Indication of immediate medical attention and special treatment needed, if necessary

See first aid information above. Note to Physicians: Provide general supportive measures and treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use media suitable to extinguish surrounding fire.

Specific hazards arising from the chemical

Hazardous Combustion Products: Calcium Oxide

Special protective actions for fire-fighters

Keep personnel away from and upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (self-contained breathing apparatus).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Spill /Leak Procedures:

Do NOT use water on bulk material spills. Lime reacts violently with water, releasing heat. Use proper protective equipment.

Small Spills:

Use dry methods to collect spilled materials. Avoid generating dust. Do not clean up with compressed air. Store collected materials in dry, sealed plastic or metal containers. Residue on surfaces may be water washed.

Large Spills:

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Use dry methods to collect spilled materials. Evacuate area downwind of clean-up operations to minimize dust exposure. Store spilled materials in dry, sealed plastic or metal containers. Methods and materials for containment and cleaning up

Environmental precautions

No data available.

Methods and materials for containment and cleaning up

Containment:

For large spills, as much as possible, avoid the generation of dusts. Prevent release to sewers or waterways.

Cleanup:

Residual amounts of material can be flushed with large amounts of water. Equipment can be washed with either a mild vinegar and water solution, or detergent and water.

SECTION 7: Handling and storage

Precautions for safe handling

Evacuate persons not wearing protective equipment from the area of the spill until clean-up is complete.

Collect powdered material in the most convenient and safe manner and deposit in sealed containers.

Avoid as much contact with the product as possible.

Ventilate and wash area after the clean-up is complete.

It may be necessary to contain and dispose of Hi-Yield Horticultural Hydrated Lime as a HAZARDOUS WASTE.

Contact your State Department of Environmental Protection or regional office of the Federal EPA for specific recommendation

Conditions for safe storage, including any incompatibilities

Store in dry places sheltered from humidity. Keep away from acids. Keep out of reach of children.

SECTION 8: Exposure controls/personal protection

Control parameters

1. Magnesium oxide fume - total particulate (CAS: 1309-48-4)

PEL (Inhalation): 15 mg/m³ (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 10 mg/m³ (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): See Appendix D (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

2. Silica, crystalline quartz, respirable dust (CAS: 14808-60-7)

PEL (Inhalation): See Annotated Z-3 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): See Annotated Z-3 mg/m³ (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): See Annotated Z-3 (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): See Annotated Z-3 (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

Appropriate engineering controls

Provide ventilation adequate to maintain PELs.

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Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use NIOSH/MSHA N95 approved respirators if airborne concentration exceeds PEL.

Skin protection

Use appropriate gloves to prevent skin contact. Where there is a risk of skin contact, wear suitable clothing to prevent such contact.

Respiratory protection

Wear NIOSH N-95 Dust Mask.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)	Solid/ White or grayish - white
Odor	Odorless
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	Melting Point : 580 C
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability or explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	Slightly Soluble in Water
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.

Additional properties

Physical state	Solid
Color	White or grayish
Explosive properties	No data available.
Oxidizing properties	No data available.

Further safety characteristics (supplemental)

No data available.

SECTION 10: Stability and reactivity

Reactivity

Not generally reactive under normal conditions

Chemical stability

Stable under normal conditions

Possibility of hazardous reactions

Mixture with strong acids

Conditions to avoid

None known

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Incompatible materials

Strong Acids

Hazardous decomposition products

Calcium Oxides

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Silica, crystalline

Result: IARC: 1 - Group 1: Carcinogenic to humans (Quartz)

NTP: Known to be human carcinogen (Quartz)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Skin corrosion/irritation

Can cause severe irritation of eyes, skin, respiratory tract, and gastrointestinal tract.

Serious eye damage/irritation

Can cause severe irritation of eyes, skin, respiratory tract, and gastrointestinal tract.

Respiratory or skin sensitization

Can cause severe irritation of eyes, skin, respiratory tract, and gastrointestinal tract.

Germ cell mutagenicity

This product is not listed by MSA, OSHA, or IARC as a carcinogen, but this product may contain crystalline silica, which has been classified by IARC as (Group 1) carcinogenic to humans when inhaled in the form of quartz or cristobalite. No reported Carcinogenicity, Reproductive Effects, Teratogenicity or Mutagenicity.

Carcinogenicity

This product is not listed by MSA, OSHA, or IARC as a carcinogen, but this product may contain crystalline silica, which has been classified by IARC as (Group 1) carcinogenic to humans when inhaled in the form of quartz or cristobalite. No reported Carcinogenicity, Reproductive Effects, Teratogenicity or Mutagenicity.

Reproductive toxicity

This product is not listed by MSA, OSHA, or IARC as a carcinogen, but this product may contain crystalline silica, which has been classified by IARC as (Group 1) carcinogenic to humans when inhaled in the form of quartz or cristobalite. No reported Carcinogenicity, Reproductive Effects, Teratogenicity or Mutagenicity.

Specific target organ toxicity (STOT) - single exposure

No information available.

Specific target organ toxicity (STOT) - repeated exposure

No information available.

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Aspiration hazard

No information available.

Additional information

Information on the likely routes of exposure: Inhalation and ingestion.

Symptoms related to the physical, chemical and toxicological characteristics:

Nausea, Coffee Ground Emesis, Diarrhea, and Dermatitis

SECTION 12: Ecological information

Toxicity

Alkaline substance that increases pH to 12.4 in a saturated water solution at 25°C.

Calcium hydroxide gradually reacts with CO₂ in air to form calcium carbonate (CaCO₃).

Calcium carbonate is ecologically neutral.

Uncontrolled spillage in surface waters should be avoided since the increase pH could be detrimental to fish.

Harmful to aquatic life in high concentration.

Persistence and degradability

Dissolved in water

Bioaccumulative potential

This material shows no bioaccumulation effect or food chain concentration toxicity.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of in accordance with all applicable federal, state, and local environmental regulations. If this product as supplied, and unmixed, becomes a waste, it will not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act.

SECTION 14: Transport information

DOT (US)

UN Number: Not Regulated

Proper Shipping Name: Calcium Hydroxide

Environmental hazards: This material is alkaline and if released into water or moist soil will cause an increase in pH

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

New Jersey Right To Know Components

Common name: Magnesium oxide

CAS number: 1309-48-4

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Pennsylvania Right To Know Components

Chemical name: Magnesium oxide

CAS number: 1309-48-4

New Jersey Right To Know Components

Common name: Silica, quartz

CAS number: 14808-60-7

Pennsylvania Right To Know Components

Chemical name: Quartz

CAS number: 14808-60-7

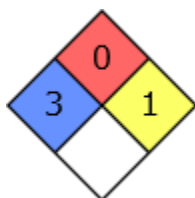
California Prop. 65 components

Chemical name: Silica, crystalline (airborne particles of respirable size)

CAS number: 14808-60-7

10/01/1988 - cancer

NFPA Rating



SECTION 16: Other information

No data available.

Further information/disclaimer

Voluntary Purchasing Groups, Inc. believes the information presented herein is accurate and correct as of the document date. The presented information is based upon available data from reliable sources. Voluntary Purchasing Groups, Inc. makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.