High Calcium Hydrated Lime

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Issue date: 12/16/2022
Revision date: 12/16/2022
Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product name	:	High Calcium Hydrated Lime
Product type	:	Solid
Other means of identification	:	Hydrated Lime, Calcitic Hydrated Lime, Lime, Slaked lime, Lime Putty, Lime Slurry, Milk of Lime, Calcium Hydroxide.

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	Neutralization, flocculation, stabilization, absorption.

1.3. Supplier

Manufacturer
GRAYMONT
#200-10991 Shellbridge Way
Richmond, BC V6X 3C6 - Canada
T 1 604 207-4292; Toll free1 866 207-4292 - F 1 604 207-9014
www.graymont.com

Distributor
Graymont Western US Inc
585 W Southridge Way
Sandy, Utah 84070 - United States
T +1 801-262-3942

1.4. Emergency telephone number

Emergency number	:	CHEMTREC 1 (800) 424-9300 CHEMTREC International +1 (703) 527-3887 24 hr

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 1
Carcinogenicity Category 1A
Specific target organ toxicity – Single exposure, Category 3
Specific target organ toxicity – Repeated exposure, Category 1

2.2. GHS Label elements, including precautionary statements

GHS labelling

Hazard pictograms (GHS) :

Signal word (GHS)	:	Danger
Hazard statements (GHS)	:	Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure.
Precautionary statements (GHS)	:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center or doctor if you feel unwell.
IF IN EYES: 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.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
Calcium hydroxide	Calcium hydroxide Calcium dihydroxide / Calcium hydroxide (Ca(OH)2) / Hydrated lime / Lime, hydrated / CALCIUM HYDROXIDE / Slaked lime	CAS-No.: 1305-62-0	90 – 100
Quartz	Quartz Quartz (SiO2) / Silica, crystalline, quartz / Crystalline silica, quartz / .alpha.-Quartz / Silica, crystalline, .alpha.-quartz / QUARTZ / Crystalline silica in the form of quartz / Quartz, silica / Quartz (respirable fraction) / Silica dust / Silica, crystalline-.alpha.quartz / Silica, .alpha.-quartz / Silicon dioxide / Silica, quartz / Silica, crystalline / Quartz (crystalline silica) / Silica dust, crystalline / QUARTZ POWDER / Silica, crystalline (quartz)	CAS-No.: 14808-60-7	0.0001 – 1

Comments : Crystalline silica has been found in some products at or above detection level 0.1%. Concentration is dependent upon limestone source.

Any concentration shown as a range is to protect confidentiality or is due to batch variation. If a generic chemical name is shown and/or the CAS number is not disclosed, the specific chemical identity has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : None.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. . Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Do not breathe dust. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Avoid generating dust. Use only outdoors or in a well-ventilated area. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Good housekeeping is important to prevent accumulation of dust. Wear appropriate PPE (see Section 8).

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store locked up. Store in a well-ventilated place. Store in dust-tight, dry, labelled containers. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

High Calcium Hydrated Lime
No additional information available

Calcium hydroxide (1305-62-0)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA)	5 mg/m³

Calcium hydroxide (1305-62-0)	
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m³
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	5 mg/m³
USA - MSHA - Occupational Exposure Limits	
MSHA PEL TWA 8/40 h	5 mg/m³

Quartz (14808-60-7)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Silica-Crystalline: Quartz
OEL TWA	0.025 mg/m³ (respirable particulate)
Notations and remarks	Carcinogenicity A2
Regulatory reference	Alberta Regulation 191/2021
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Silica, Crystalline - alpha quartz
OEL TWA	0.025 mg/m³ (respirable)
Notations and remarks	ACGIH Carcinogenicity category A2; IARC group 1 carcinogen
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	0.1 mg/m³ (designated substances regulation-respirable fraction (Silica, crystalline)
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA)	0.1 mg/m³ (respirable dust)
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	0.05 mg/m³ (Trydimite removed-respirable fraction (Silica - crystalline (Trydimite removed))
USA - ACGIH - Occupational Exposure Limits	
Local name	Silica crystaline - quartz
ACGIH OEL TWA	0.025 mg/m³ (respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
ACGIH chemical category	Suspected Human Carcinogen
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Total Dust) (Silica: Crystalline)
OSHA PEL TWA [1]	50 µg/m³ (Respirable crystalline silica)

Quartz (14808-60-7)	
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
USA - IDLH - Occupational Exposure Limits	
IDLH	50 mg/m³ (respirable dust)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	0.05 mg/m³ (respirable dust)
USA - MSHA - Occupational Exposure Limits	
MSHA PEL TWA 8/40 h	30 mg/m³ / (%SiO2) + 2 mg/m³ (Total dust) 10 mg/m³ / (%SiO2) + 2 mg/m³ (Respirable dust)

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves resistant to chemical penetration

Eye protection:

If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Fine powder.
Colour : White
Odour : Sweet Soil
Odour threshold : No data available
pH : 12.45 saturated solution at 25°C (77°F)
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : Not applicable
Relative evaporation rate (butylacetate=1) : No data available

Flammability	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20°C / 68 °F	:	Not applicable
Relative density	:	2.3 – 2.4
Solubility	:	Water: 0.165 g/100ml at 20°C (68°F)
Partition coefficient n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	540 °C (1004 °F)
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive limits	:	Not applicable
Explosive properties	:	No data available
Oxidising properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Oxidizing materials. Acids. Moisture. Reactive materials. Powdered metals. Acid anhydrides. Organic nitro-compounds.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified.
Acute toxicity (dermal)	:	Not classified.
Acute toxicity (inhalation)	:	Not classified.

Calcium hydroxide (1305-62-0)	
LD50 oral rat	7340 mg/kg
LD50 dermal rat	> 2500 mg/kg
LC50 inhalation rat	> 6.04 mg/l/4h
ATE CA (oral)	7340 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.
pH: 12.45 saturated solution at 25°C (77°F)

Serious eye damage/irritation : Causes serious eye damage.
pH: 12.45 saturated solution at 25°C (77°F)

Respiratory or skin sensitisation : Not classified.

Germ cell mutagenicity : Not classified.

Carcinogenicity : May cause cancer if inhaled. Risk of cancer depends on duration and level of exposure.

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : Not classified.

STOT-single exposure : May cause respiratory irritation.

Calcium hydroxide (1305-62-0)	
STOT-single exposure	May cause respiratory irritation.

: Causes damage to organs through prolonged or repeated exposure.

STOT-repeated exposure

Quartz (14808-60-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified.

High Calcium Hydrated Lime	
Viscosity, kinematic	Not applicable

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No known significant effects or critical hazards.

12.2. Persistence and degradability

High Calcium Hydrated Lime	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

High Calcium Hydrated Lime	
Partition coefficient n-octanol/water	Not applicable
Bioaccumulative potential	Not established.

Calcium hydroxide (1305-62-0)	
BCF - Fish [1]	(no bioaccumulation)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not applicable

TDG
Transport hazard class(es) (TDG) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable

Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

DOT
No data available

TDG
No data available

IMDG
No data available

IATA
No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations

No additional information available

15.3. US State regulations

WARNING: This product can expose you to Silica, respirable crystalline, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Calcium hydroxide(1305-62-0)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Quartz(14808-60-7)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List

SECTION 16: Other information

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Revision date : 12/16/2022

Other information : None.

Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

Full text of H-statements	
Carc. 1A	Carcinogenicity, Category 1A
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

SDS HazCom 2012 - WHMIS 2015 (Nexreg) - Section 15 2021

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