



## 202602123901 Addendum 1 Graymont Western Lime Inc Supplier Response

### Event Information

Number: 202602123901 Addendum 1  
Title: 2026-2027 Chemical Consortium  
Type: Request for Proposal (RFP) - Sealed  
Issue Date: 2/12/2026  
Deadline: 2/26/2026 02:00 PM (ET)  
Notes: Notice to Bidders:

Sealed Proposals in response to this Request for Proposal (“RFP”) will be received by the Board of Water and Light (“BWL”) for furnishing of Mid-Michigan Water Chemical Consortium 2026-2027.

Proposals must be in full accordance with the enclosed Scope of Work.

Proposals must be submitted through IonWave. Proposals received via e-mail will not be accepted.

The BWL reserves the right to reject any or all Proposals, waive irregularities or technicalities in any Proposal, and accept any Proposal in whole or in part, which in the opinion of the BWL, is in its best interest. The BWL does not limit the methods or factors to be used for evaluation.

### Contact Information

Contact: Monica Clark  
Address: 1110 South Pennsylvania Ave.  
Lansing, MI 48912

Email: Monica.Clark@LBWL.COM

## Graymont Western Lime Inc Information

Contact: Nick Bobos  
Address: 2021 S 18th Ave  
STE 102  
West Bend, WI 53095  
Phone: (262) 277-8794  
Email: nbobos@graymont.com  
Web Address: www.graymont.com

By submitting your response, you certify that you are authorized to represent and bind your company.

Nicholas Michael Bobos

*Signature*

Submitted at 2/23/2026 03:58:56 PM (ET)

nbobos@graymont.com

*Email*

## Requested Attachments

**Exceptions to Terms and Conditions (if applicable)**

*No response*

**Other Attachment**

TDS\_408\_1100\_Calcitic  
Quicklime\_Pebble\_19x6.3mm\_2020.pdf

**Sworn and Notarized Affidavit of Compliance**

Sworn and Notarized Affidavit of  
Compliance.pdf

## Response Attachments

**TDS\_408\_1100\_Calcitic Quicklime\_Pebble\_19x6.3mm\_2020.pdf**

TDS

**High-Calcium-Quicklime-NoA.pdf**

SDS

**Graymont ANSI Water Cert.pdf**

ANSI

## Bid Attributes

### 1 Company Contact

Please provide the primary contact's name, e-mail, and phone number for this proposal.

Nick Bobos, nbobos@graymont.com, 262-277-8794

### 2 How many years has your firm been in business under the present ownership?

76 years

### 3 Have you done business with the Board of Water and Light? If so, furnish specifics.

Yes. Current Lime Supplier

### 4 Have you done business with the City of Lansing? If so, furnish specifics.

Yes. Current Lime Supplier

<b>5</b>	<b>Have you ever defaulted on a contract or been involved in litigation with the BWL or the City of Lansing? If so, furnish specifics.</b>
	<input style="width: 90%;" type="text" value="No"/>
<b>6</b>	<b>Have you ever defaulted on a contract or been involved in litigation with any other client in the past five years? If so, furnish specifics.</b>
	<input style="width: 90%;" type="text" value="No"/>
<b>7</b>	<b>List any relationships between your firm's staff and any current BWL employee.</b>
	<input style="width: 90%;" type="text" value="No"/>
<b>8</b>	<b>List at least three (3) references for similar work you have performed for other clients. Include client's name, contact name, title and phone number.</b>
	<input style="width: 90%;" type="text" value="City of Elgin, IL City of Minneapolis, MN City of Midland, MI"/>
<b>9</b>	<b>List subcontractors that you plan to use on this project.</b>
	<input style="width: 90%;" type="text" value="The only subcontractor is the trucking company. It's Cordes Trucking. Michigan based, they are your current lime hauler."/>
<b>10</b>	<b>Indicate any exceptions to the enclosed Terms and Conditions</b> If YES, Contractor must provide red-lined editing on the BWL Terms and Conditions Microsoft Word document only. Any submission of, or general references to Contractor Terms and Conditions in its entirety anywhere within the proposal will invalidate the proposal.
	<input style="width: 100px;" type="text" value="No"/>
<b>11</b>	<b>Acknowledgment of receipt of any Addendas issued.</b>
	<input style="width: 100px;" type="text" value="Yes"/>
<b>12</b>	<b>Confirm you have reviewed all attachments included in this solicitation.</b>
	<input checked="" type="checkbox"/> Yes
<b>13</b>	<b>I have read and agreed.</b>  The Bidder states that this proposal is made in conformity with the Proposal Documents and agrees that, in the event of any discrepancies or differences between any conditions of their proposal and the Proposal Documents provided in the Instructions to Bidders and completed by the bidder, the provisions of the latter shall prevail. No verbal or written agreements or understandings considered or entered into prior to signing of a contract in the form of a purchase order, shall be binding after the signing of the contract unless incorporated in the contract.  The Bidder certifies that this proposal is made in good faith, upon the best information, with knowledge and accuracy, and without collusion or connection with any other person or persons submitting proposals for the work.
	<input checked="" type="checkbox"/> I have read and agreed

## Bid Lines

<b>1</b>	<b>Sodium Hypochlorite (per gallon)</b>	<b>No Bid</b>
	Quantity: <u>  1  </u> UOM: <u>  GAL  </u>	
	Manufacturer: <input style="width: 80%;" type="text" value="No response"/>	
	Manufacturer #: <input style="width: 80%;" type="text" value="No response"/>	

<b>2</b>	Sodium Hypochlorite Demurrage (first 4 hours free)	
	Quantity: <u>  1  </u> UOM: <u>  HR  </u>	<b>No Bid</b>
	Manufacturer: <u>  No response  </u>	
	Manufacturer #: <u>  No response  </u>	

<b>3</b>	Hydrofluosilic Acid- 40,000 lbs. minimum shipments	
	Quantity: <u>  1  </u> UOM: <u>  TON  </u>	<b>No Bid</b>
	Manufacturer: <u>  No response  </u>	
	Manufacturer #: <u>  No response  </u>	

<b>4</b>	Hydrofluosilic Acid- 30,000 lbs. minimum shipments	
	Quantity: <u>  1  </u> UOM: <u>  TON  </u>	<b>No Bid</b>
	Manufacturer: <u>  No response  </u>	
	Manufacturer #: <u>  No response  </u>	

<b>5</b>	Hydrofluosilic Acid- multiple locations in 40,000 lbs. minimum shipments	
	Quantity: <u>  1  </u> UOM: <u>  TON  </u>	<b>No Bid</b>
	Manufacturer: <u>  No response  </u>	
	Manufacturer #: <u>  No response  </u>	

<b>6</b>	Hydrofluosilic Acid- Demurrage (first 4 hours free)	
	Quantity: <u>  1  </u> UOM: <u>  HR  </u>	<b>No Bid</b>
	Manufacturer: <u>  No response  </u>	
	Manufacturer #: <u>  No response  </u>	

<b>7</b>	Ferric Chloride- Dry Tons	
	Quantity: <u>  1  </u> UOM: <u>  TON  </u>	<b>No Bid</b>
	Manufacturer: <u>  No response  </u>	
	Manufacturer #: <u>  No response  </u>	

<b>8</b>	Ferric Chloride-Demurrage (first 4 hours free)	
	Quantity: <u>  1  </u> UOM: <u>  EA  </u>	<b>No Bid</b>
	Manufacturer: <u>  No response  </u>	
	Manufacturer #: <u>  No response  </u>	

<b>9</b>	Pebble Quicklime		
	Quantity: <u>  1  </u>	UOM: <u>  TON  </u>	Price: <input type="text" value="\$210.00"/> Total: <input type="text" value="\$210.00"/>
	Manufacturer: <input type="text" value="Graymont"/>		
	Manufacturer #: <input type="text" value="1100"/>		

<b>10</b>	Pebble Quicklime- Demurrage (first 4 hours free)		
	Quantity: <u>  1  </u>	UOM: <u>  HR  </u>	Price: <input type="text" value="\$125.00"/> Total: <input type="text" value="\$125.00"/>
	Manufacturer: <input type="text" value="Graymont"/>		
	Manufacturer #: <input type="text" value="1100"/>		

<b>11</b>	Soda Ash		
	Quantity: <u>  1  </u>	UOM: <u>  TON  </u>	<b>No Bid</b>
	Manufacturer: <input type="text" value="No response"/>		
	Manufacturer #: <input type="text" value="No response"/>		

<b>12</b>	Soda Ash- Demurrage (first 4 hours free)		
	Quantity: <u>  1  </u>	UOM: <u>  HR  </u>	<b>No Bid</b>
	Manufacturer: <input type="text" value="No response"/>		
	Manufacturer #: <input type="text" value="No response"/>		

**Response Total: \$335.00**

**SWORN AND NOTARIZED AFFIDAVIT OF COMPLIANCE**

**IRAN ECONOMIC SANCTIONS ACT**

**Michigan Public Act No. 517 of 2012**

All bidders must submit the following certification statement in compliance with Public Act No. 517 of 2012 (the "Iran Economic Sanctions Act") and attach this form to the bid. **The Lansing Board of Water & Light shall not accept any bid that does not include this sworn and notarized certification of statement.**

The undersigned, the owner or authorized officer of Graymont Western Lime Inc. (the Bidder), pursuant to the compliance certification requirement provided in the Lansing Board of Water & Light Request for Proposal, hereby certifies, represents and warrants that the Bidder (including its officers, directors and employees) is not an "Iran linked business" within the meaning of the Iran Economic Sanctions Act, and that in the event the Bidder is awarded a contract as a result of the aforementioned Request for Proposal, the Bidder will not become an "Iran linked business" at any time during the course of performing the work or any services under the contract.

Specifically, the undersigned, owner or authorized officer of Graymont Western Lime Inc. (the Bidder) attests it does not fall within the following definition of a "Iran linked business" under the Iran Economic Sanctions Act:

***MCL 129.312 (e) of the Act provides:***

*(e) "Iran linked business" means either of the following:*

- (i) A person [as defined below by MCL 129.312(f)] engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran.*
- (ii) A financial institution that extends credit to another person, if that person will use the credit to engage in investment activities in the energy sector of Iran.*

***MCL 129.312(f) of the Act defines "Person" as follows:***

*(f) "Person" means any of the following:*

- (i) An individual, corporation, company, limited liability company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group.*
- (ii) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in section 1701(c)(3) of the international financial institutional act, 22 USC 262r(c)(3).*

The Bidder further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification is made, whichever is greater, the cost of the Lansing Board of Water & Light's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a Request for Proposal for three (3) years from the date it is determined that the person has submitted the false certification.

BIDDER

Celia

By: Celia Johnson

Its: Vice President, General Counsel and Corporate Secretary

Date: February 17, 2026

PROVINCE OF British Columbia

CITY OF Richmond

This instrument was acknowledged before me on the 17th day of February, 2026, by Celia Johnson.

**Jonathan Lau  
Barrister & Solicitor  
Graymont Limited  
200-10991 Shellbridge Way  
Richmond, BC V6X 3C6**



[Signature]  
\_\_\_\_\_  
, Notary Public

British Columbia County, \_\_\_\_\_ My

Commission Expires: N/A Acting

in the <sup>Province</sup> County of: British Columbia

### SECTION 1 Identification

#### 1.1. Product identifier

Product form : Mixture  
 Product name : High Calcium Quicklime

#### 1.2. Other means of identification

Synonyms : Solid  
 Other means of identification : SNO WHITE Processed Lime; CANAMARA Pulv.; Pulverized Quicklime; BELL MINE AOD Pebble Lime; BELL MINE Chemical Pebble Lime; BELL MINE Ground Lime; Calcined waste

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

#### 1.4. Supplier's details

##### Manufacturer

GRAYMONT  
 #200-10991 Shellbridge Way  
 Richmond, BC, V6X 3C6  
 Canada  
 T 1 604 207-4292; Toll free 1 866 207-4292 - F 1 604 207-9014  
[www.graymont.com](http://www.graymont.com)

##### Distributor

GRAYMONT  
 585 W Southridge Way  
 Sandy, Utah, 84070  
 United States  
 T +1 801-262-3942

#### 1.5. Emergency phone number

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

### SECTION 2 Hazard 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, Respiratory tract irritation  
 Specific target organ toxicity, Repeated exposure, Category 1

#### 2.2. Label elements

##### 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.

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

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 or attention.  
Specific treatment (see section 4 of the SDS).  
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  
Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

### 2.4. Hazards not otherwise classified

Other hazards which do not result in classification : Reacts violently with water, generating heat which can ignite combustible material.

### 2.5. 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	%Weight
Calcium oxide	Calcium oxide Lime / Quicklime / CALCIUM OXIDE / Quicklime (CaO) / Calcium oxide (CaO) / Lime (calcium oxide)	CAS-No.: 1305-78-8	≥ 90
Quartz	Quartz Quartz (SiO <sub>2</sub> ) / 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

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

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 necessary 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 for 15 minutes. 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 15 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/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. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : 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 : Dry chemical.  
Unsuitable extinguishing media : Halogenated extinguisher. Do not use water.

#### 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).

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

### 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.

##### For non-emergency personnel

No additional information available

##### For emergency responders

Environmental precautions : Prevent entry to sewers and public waters.

#### 6.2. Methods and materials 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.

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 : 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. Use only outdoors or in a well-ventilated area. Avoid generating dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Good housekeeping is important to prevent accumulation of dust. Ensure adequate natural or mechanical ventilation in the form local or general exhaust ventilation is in use to ensure exposure is below established regulatory limits. If ventilation is not adequate, use respiratory protection in the form of a CSA/NIOSH- Approved Particulate Filtering Facepiece Respirators such as an N95 respirator or equivalent.

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

#### 7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a well-ventilated place. Store in dust-tight, dry, labelled containers.

Specific end uses : Not available.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Calcium oxide (1305-78-8)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	2 mg/m <sup>3</sup>
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWAEV)	2 mg/m <sup>3</sup>
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	2 mg/m <sup>3</sup>

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

Calcium oxide (1305-78-8)	
<b>Canada (Manitoba) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Canada (New Brunswick) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Canada (Newfoundland and Labrador) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Canada (Nova Scotia) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Canada (Nunavut) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
OEL STEL	4 mg/m <sup>3</sup>
<b>Canada (Northwest Territories) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
OEL STEL	4 mg/m <sup>3</sup>
<b>Canada (Ontario) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Canada (Prince Edward Island) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
<b>Canada (Saskatchewan) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
OEL STEL	4 mg/m <sup>3</sup>
<b>Canada (Yukon) - Occupational Exposure Limits</b>	
OEL TWA	2 mg/m <sup>3</sup>
OEL STEL	4 mg/m <sup>3</sup>
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Calcium oxide
ACGIH OEL TWA	2 mg/m <sup>3</sup>
Remark (ACGIH)	TLV® Basis: URT irr
Regulatory reference	ACGIH 2020
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Calcium oxide
OSHA PEL TWA [1]	5 mg/m <sup>3</sup>
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
<b>Quartz (14808-60-7)</b>	
<b>Canada (Alberta) - Occupational Exposure Limits</b>	
Local name	Silica-Crystalline: Quartz
OEL TWA	0.025 mg/m <sup>3</sup> (respirable particulate)
Notations and remarks	Carcinogenicity A2

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

<b>Quartz (14808-60-7)</b>	
Regulatory reference	Alberta Regulation 191/2021
<b>Canada (Quebec) - Occupational Exposure Limits</b>	
Local name	Silica - Crystalline, Quartz
VEMP (OEL TWA EV)	0.1 mg/m <sup>3</sup> (respirable dust)
Notations and remarks	C2, EM
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
<b>Canada (British Columbia) - Occupational Exposure Limits</b>	
Local name	Silica, Crystalline - alpha quartz
OEL TWA	0.025 mg/m <sup>3</sup> (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)
<b>Canada (Manitoba) - Occupational Exposure Limits</b>	
Local name	Silica crystalline - quartz
OEL TWA	0.025 mg/m <sup>3</sup> (respirable particulate matter)
Notations and remarks	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023
<b>Canada (New Brunswick) - Occupational Exposure Limits</b>	
OEL TWA	0.025 mg/m <sup>3</sup> (respirable fraction)
<b>Canada (Newfoundland and Labrador) - Occupational Exposure Limits</b>	
Local name	Silica crystalline - quartz
OEL TWA	0.025 mg/m <sup>3</sup> (respirable particulate matter)
Notations and remarks	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023
<b>Canada (Nova Scotia) - Occupational Exposure Limits</b>	
Local name	Silica crystalline - quartz
OEL TWA	0.025 mg/m <sup>3</sup> (respirable particulate matter)
Notations and remarks	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023
<b>Canada (Nunavut) - Occupational Exposure Limits</b>	
Local name	Silica - Crystalline: Quartz
OEL TWA	0.05 mg/m <sup>3</sup> (Trydimite removed-respirable fraction (Silica - crystalline))
Notations and remarks	Designated substance
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
<b>Canada (Northwest Territories) - Occupational Exposure Limits</b>	
Local name	Silica - Crystalline: Quartz
OEL TWA	0.05 mg/m <sup>3</sup> (Trydimite removed-respirable fraction (Silica - crystalline))
Notations and remarks	Designated substance
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

<b>Quartz (14808-60-7)</b>	
<b>Canada (Ontario) - Occupational Exposure Limits</b>	
Local name	Silica, Crystalline - Quartz
OEL TWA	0.1 mg/m <sup>3</sup> (designated substances regulation-respirable fraction (Silica, crystalline))
Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
<b>Canada (Prince Edward Island) - Occupational Exposure Limits</b>	
Local name	Silica crystalline - quartz
OEL TWA	0.025 mg/m <sup>3</sup> (respirable particulate matter)
Notations and remarks	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023
<b>Canada (Saskatchewan) - Occupational Exposure Limits</b>	
Local name	Silica - Crystalline: Quartz
OEL TWA	0.05 mg/m <sup>3</sup> (Trydimite removed-respirable fraction (Silica - crystalline (Trydimite removed)))
Notations and remarks	Designated Chemical Substance
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
<b>Canada (Yukon) - Occupational Exposure Limits</b>	
OEL TWA	300 particle/mL (Silica - Quartz, crystalline)
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Silica crystalline - quartz
ACGIH OEL TWA	0.025 mg/m <sup>3</sup> (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 2023
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Quartz (Total Dust) (Silica: Crystalline)
OSHA PEL TWA [1]	50 µg/m <sup>3</sup> (Respirable crystalline silica)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m <sup>3</sup> / (%SiO <sub>2</sub> +2)) for mg/m <sup>3</sup> . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

### 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, such as 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.

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

### 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. Wear an appropriate NIOSH approved respirator if concentration levels exceed safe exposure limits.

### 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. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystalline.
Colour	: White
Odour	: Odourless Soil
Odour threshold	: No data available
pH	: 12.45 saturated solution at 25°C (77 °F)
Melting point	: 2570 – 2625 °C (4658 - 4757 °F)
Freezing point	: No data available
Boiling point	: 2850 (5162 °F)
Flash point	: Not applicable
Relative evaporation rate (butylacetate=1)	: Not applicable
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20°C/ 68 °F	: Not applicable
Relative density	: 3.25 – 3.28
Solubility	: Water: 1250 mg/kg at 20°C (68 °F)
Partition coefficient n-octanol/water	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Explosive limits	: Not applicable
Particle characteristics	: No data available

### Calcium oxide

Boiling point	2850 °C Atm. press.: 101325 Pa Decomposition: 'no'
Vapour pressure	0 hPa (at 20 °C)

### Quartz

Boiling point	2230 °C
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### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10 Stability and reactivity

### 10.1. Reactivity

Reacts violently with : Strong acids. Reacts with water to form Calcium Hydroxide. The heat generated when mixed with water or moist air is sufficient to ignite surrounding materials such as paper, wood or cloth.

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Exothermic reaction with water.

### 10.4. Conditions to avoid

Incompatible materials. Moisture.

### 10.5. Incompatible materials

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

### 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.  
Acute toxicity (ocular) : Not classified

#### Calcium oxide (1305-78-8)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: other:US Federal Register 38: 187, Part 1500, Section 41, 1973.
LC50 inhalation rat	> 6.04 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)

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

#### Calcium oxide (1305-78-8)

pH	12.5 (saturated solution)
----	---------------------------

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

#### Calcium oxide (1305-78-8)

pH	12.5 (saturated solution)
----	---------------------------

Respiratory or skin sensitisation : Not classified.  
Germ cell mutagenicity : Not classified.

Carcinogenicity : May cause cancer (Inhalation).

#### Quartz (14808-60-7)

IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

Quartz (14808-60-7)	
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : Not classified.  
STOT-single exposure : May cause respiratory irritation.

Calcium oxide (1305-78-8)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Causes damage to organs (lungs) through prolonged or repeated exposure.

Calcium oxide (1305-78-8)	
LOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.413 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Quartz (14808-60-7)	
Additional information	Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a scarring of the lungs. This disease may be disabling as it reduces lung capacity. The risk of contracting silicosis and the severity of the disease is related to the amount of dust exposure and the length of time (usually years) of exposure.
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified.

High Calcium Quicklime	
Viscosity, kinematic	Not applicable

Calcium oxide (1305-78-8)	
Viscosity, kinematic	223.529 – 230.303 mm <sup>2</sup> /s

Quartz (14808-60-7)	
Viscosity, kinematic	No data available

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. Ecotoxicity

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

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

Calcium oxide (1305-78-8)	
LC50 - Fish [1]	1070 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static] Source: IUCLID)
EC50 - Crustacea [1]	49.1 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	1130.3 mg/l Test organisms (species): Navicula seminulum
NOEC (chronic)	32 mg/l Test organisms (species): Crangon septemspinosa Duration: '14 d'
NOEC chronic fish	100 mg/l Test organisms (species): other:Tilapia nilotica Duration: '46 d'

### 12.2. Persistence and degradability

High Calcium Quicklime	
Persistence and degradability	Not established.

Calcium oxide (1305-78-8)	
Persistence and degradability	Rapidly degradable

Quartz (14808-60-7)	
Persistence and degradability	Rapidly degradable

### 12.3. Bioaccumulative potential

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

Calcium oxide (1305-78-8)	
BCF - Fish [1]	(no bioaccumulation)

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Ozone	: Not classified.
Fluorinated greenhouse gases	: No
Other information	: No other effects known.

## SECTION 13 Disposal considerations

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

DOT NA No	: Not applicable
UN-No. (TDG)	: Not applicable

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

UN-No. (IMDG) : Not applicable  
UN-No. (IATA) : 1910

### 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) : Calcium oxide

### 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) : 8  
Danger labels (IATA) : 8



### 14.4. Packing group

Packing group (DOT) : Not applicable  
Packing group (TDG) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : III

### 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

# High Calcium Quicklime

## Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

### SECTION 15 Regulatory information

#### 15.1. 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. 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](http://www.P65Warnings.ca.gov).

### SECTION 16 Other Information

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

Revision date : 2025-05-07  
Issue date : 2022-12-16  
Other information : None.  
Prepared by : Nexreg Compliance Inc.  
[www.Nexreg.com](http://www.Nexreg.com)



#### Indication of changes:

V1.1 - Handling & storage  
V1.2 – Section 4, Section 11 statements  
V1.3 – Composition information  
V2.0 – Safety data sheet update  
V2.1 – Supplier Information

SDS HazCom 2024 - WHMIS 2022 (Nexreg) 2025

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

**GRAYMONT WESTERN LIME INC.**

2021 S 18<sup>th</sup> Ave #102  
West Bend, WI 53095

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Telephone: 1-800-433-0036  
www.graymont.com



**TO WHOM IT MAY CONCERN:**

I hereby certify that the **High Calcium Lime** as manufactured by Graymont Western Lime Inc. of West Bend, Wisconsin, does comply with ASTM C25 and ASTM C-911 "Standard Specifications for Quicklime and Hydrated Lime for Chemical Uses", and **ANSI/AWWA B202** "AWWA Standard for Quicklime and Hydrated Lime".

Our lime is certified by **Underwriter's Laboratories Inc.** for **ANSI/NSF 60** standards under drinking water treatment additives.

Manufacturers Ref: # **MH17697**.

UL # **2M90**

*Nicholas Bobos*

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Nick Bobos  
Graymont Western Lime  
262-277-8794  
Email: [nbobos@graymont.com](mailto:nbobos@graymont.com)

**HIGH CALCIUM “PEBBLE” QUICKLIME**

Nominal size: 19 – 6.3 mm (3/4” x 1/4”)

Port Inland Plant, Gulliver, Michigan

**PRODUCT DESCRIPTION**

A white porous solid obtained by the calcination of high-purity limestone (CaCO<sub>3</sub>) and composed essentially of calcium oxide (CaO).

**TYPICAL CHEMICAL PROPERTIES**

(ASTM C25, C1271, C1301)

Total Calcium Oxide (CaO) (%)	93.0
Available Calcium Oxide (CaO) (%)	91.4
Magnesium Oxide (MgO) (%)	2.7
Silica (SiO <sub>2</sub> ) (%)	1.6
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> ) (%)	0.2
Alumina (Al <sub>2</sub> O <sub>3</sub> ) (%)	0.6
Manganese Oxide (MnO) (ppm)	< 50
Total Sulfur (S) (%)	0.06
Loss on ignition (%)	1.6
Calcium Carbonate (CaCO <sub>3</sub> ) (%)	1.9

**TYPICAL PHYSICAL PROPERTIES**

(ASTM C110, AWWA B202)

Bulk Density	
▲ Loose / Packed, (kg/m <sup>3</sup> )	880 – 980
▲ Loose / Packed, (lb/ft <sup>3</sup> )	55 – 61
Slaking Rate	
▲ Temperature Rise in 30 sec (°C)	20
▲ Temperature Rise in 3 min (°C)	46
▲ Total Temperature Rise (°C)	51
▲ Total Active Slaking Time (min)	5.8
Wet Hunter Brightness (Y)	80.2
Wet Hunter Color (b)	4.4
Wet Hunter Lightness (L)	89.6

**CLASSICAL REFERENCE DATA**

(CRC Handbook of Chemistry and Physics)

Specific Gravity	3.25 – 3.38
Solubility in Water (10 °C) (g/l)	1.31
pH (saturated solution) (25 °C)	12.454
Melting point (°C)	2613
Hardness (Mohs)	2 – 3
Specific Heat (0 °C) (cal/g*°C)	0.17
Heat of solution (cal/g)	844 – 847

**SIZE DISTRIBUTION**

(ASTM MNL32)

Sieve (mm)	Sieve (U.S.A.)	% Passing
25	1”	100
19	3/4”	98
12.5	1/2”	58
9.5	3/8”	31
6.3	1/4”	7



WATER QUALITY

ANSI / NSF 60  
 DRINKING WATER TREATMENT ADDITIVES  
 < 2 M 90 >  
 MAXIMUM USE LEVEL: 500 mg/l.

Meets the AWWA standard B202-19

**NOTICE**

The test data herein is based on average results on production samples. Product shipments are subject to normal variation. Accordingly, test data cannot be taken as establishing maximum or minimum specifications. Product Code: 1100 (Bulk)