Section 1: IDENTIFICATION

Product Name:	HYDRATED LIME
Synonyms:	Snowbright Hydrate, Hydrated Lime, Slaked Lime, Calcium Hydroxide Ca(OH)2.
Product Use:	Water and wastewater treatment, asphalt concrete treatment, anti-strip purposes, pH adjustment.
Restrictions on Use:	Not available.
Manufacturer/Supplier:	Mobius Chemical and Mineral Supply Corp. 101 MacLeod Trail De Winton, Alberta T0L0X0 Canada
Phone Number:	403.542.1345
Emergency Phone:	403.542.1345
	CANUTEC: 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone
Date of Preparation of SDS:	August 22, 2019

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification:
SKIN IRRITATION - Category 2
EYE DAMAGE - Category 1
SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE [Respiratory System] - Category 3
CARCINOGEN - Category 1

LABEL ELEMENTS

Hazard Pictogram(s):

Signal Word: Danger

Hazard Statements:
Causes skin irritation.
Causes serious eye damage.
May cause cancer through inhalation.
May cause respiratory irritation.

Precautionary Statements

Prevention: Wear protective gloves and eye protection. Wash exposed skin thoroughly after handling. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Response: IF ON SKIN: Wash exposed skin with plenty of water. If skin irritation occurs: get medical attention. Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Seek medical attention if you feel unwell
If exposed or concerned: Get medical advice

Storage: Store to minimize dust generation.

Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Calcium Hydroxide	Hydrated Lime	1305-62-0	>89%
Crystalline Silica	Quartz	14808-60-7	.0001-1

Section 4: FIRST-AID MEASURES

Inhalation: 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.

Eye Contact: Contact can cause severe irritation or burning of eyes, including permanent damage. Immediately flush eyes with generous amounts of water for at least 15 minutes. Pull back the eyelid to ensure that all hydrated lime dust has been washed out. Seek medical attention immediately. Do not rub eyes.

Skin Contact: Contact can cause severe irritation or burning of skin. Wash exposed area with large amounts of water. Seek medical attention immediately.

Ingestion: Do not induce vomiting. Seek medical attention immediately.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Note to Physicians: Irritation of skin, eyes, gastrointestinal tract or respiratory tract. Long-term exposure by inhalation may cause permanent damage. This product contains crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled. Inhalation of silica can also cause a chronic lung disorder, silicosis. Provide general supportive measures and treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION
Not flammable or combustible by OSHA/WHMIS criteria.

Sensitivity to Mechanical Impact:	This material is not sensitive to mechanical impact.
Sensitivity to Static Discharge:	This material is not sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media:	Hydrated Lime is non-flammable. To extinguish surrounding area fires, use the most applicable extinguishing material.
Unsuitable Extinguishing Media:	Not available.
Products of Combustion:	None.
Protection of Firefighters:	No Special measures are required. Fire-fighters should wear appropriate protective equipment and self-contained apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.
Personal Precautions:	Do not touch or walk through spilled material. Use personal protection recommended in Section 8.
Environmental Precautions:	Keep out of drains, sewers, ditches, and waterways.
Methods for Containment:	Do not flush to sewer or allow to enter waterways.
Methods for Clean-Up:	Sweep up and shovel into suitable containers for disposal.
Other Information:	See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:
Avoid direct skin contact with the material.
Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest.

Storage:
Store in a cool, dry, and well-ventilated location. Do not store near incompatible materials (see Section 10 below). Long-term storage in aluminum containers is not recommended, as calcium oxide may corrode aluminum over long periods of time.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines Component

Hydrated Lime (Calcium hydroxide) [CAS No. 1305-62-0]

ACGIH TLV: 5mg/m3

OSHA PEL: 5mg/m3

Quartz (Crystalline silica) [CAS No. 14808-60-7]

ACGIH TLV: 0.025 mg/m3

OSHA PEL: 10mg/m3 divided by (the percentage of silica in the dust plus 2) (respirable)

Engineering Controls: Provide ventilation adequate to maintain PELs.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection: Use safety glasses with side shields or safety goggles. Contact lenses should not be worn when working with lime products.

Hand Protection: Use appropriate gloves to prevent skin contact.

Skin and Body Protection: When there is a risk of skin contact, wear suitable clothing to prevent such contact.

Respiratory Protection: Use NIOSH/MSHA approved respirators if airborne concentration exceeds PEL.

General Hygiene Considerations: Eye wash fountain and emergency showers are recommended.

Canada:
Occupational Exposure Limits

Ingredient:	TWA (8 hours) ppm	TWA (8 hours) mg/m3	TWA (8 hours) Other	STEL (15 min) ppm	STEL (15 min) mg/m3	STEL (15 min) Other	Ceiling ppm	Ceiling mg/m3	Ceiling Other
Calcium dihydroxide									
US ACGIH 4/2014:	-	5	-	-	-	-	-	-	-
AB 4/2009	-	5	-	-	-	-	-	-	[3]
BC 7/2013	-	5	-	-	-	-	-	-	-
ON 1/2013	-	5	-	-	-	-	-	-	-
QC 1/2014	-	5	-	-	-	-	-	-	-
Crystalline silica, quartz									
US ACGIH 4/2014:	-	0.025	-	-	-	-	-	-	[a]
AB 4/2009	-	0.025	-	-	-	-	-	-	[b]
BC 7/2013	-	0.025	-	-	-	-	-	-	[c]
ON 1/2013	-	0.1	-	-	-	-	-	-	[a]
QC 1/2014	-	0.1	-	-	-	-	-	-	[d]

[3]Skin sensitization [a]Respirable fraction [b]Respirable particulate [c]Respirable [d]Respirable dust

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Fine white to gray powder

Colour: White or grayish-white material.

Odour: Sweet, soil like.

Odour Threshold: Not available.

Physical State: Solid.

pH:	12.45
Melting Point / Freezing Point:	1076°F, 580°C / N/A
Initial Boiling Point:	5162°F, 2850°C.
Boiling Range:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.
Flammability (solid, gas):	See Section 5.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Relative Density:	2.446
Solubilities:	Soluble in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Viscosity:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.
Density:	Not available.
Coefficient of Water/Oil Distribution:	Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity:	None known. See also Incompatibility below.
Chemical Stability:	Hydrated lime is chemically stable.
Possibility of Hazardous Reactions:	See above.
Conditions to Avoid:	Avoid dust formation, incompatible products, excess heat, and exposure to air or moisture over prolonged periods.
Incompatible Materials:	Hydrated lime should not be mixed or stored with the following materials: ACIDS

REACTIVE FLUORIDATED COMPOUNDS
REACTIVE BROMINATED COMPOUNDS
REACTIVE POWDERED METALS
ALUMINUM POWDER
ORGANIC ACID ANHYDRIDES
NITRO-ORGANIC COMPOUNDS
REACTIVE PHOPHOROUS COMPOUNDS
INTERHALOGENATED COMPOUNDS

Hazardous Decomposition Products: Calcium Oxides

Section 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: See First Aid discussion above.

Target Organs: See First Aid discussion above.

Symptoms (including delayed and immediate effects and chronic effects from exposure)
See First Aid discussion above.

Numerical measures of toxicity: No LD50/LC50 have been identified for this product's components.

Carcinogenicity: Hydrated lime is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product contains crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled.

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Hydrated Lime (Calcium Hydroxide)	-	-	-	-	-
Quartz (Crystalline Silica)	A2	Group 1	List 1	OSHA Carcinogen.	Listed.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems in high concentrations.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: This material shows no bioaccumulation effects of food chain concentration toxicity.

Mobility in Environment: Not available.

Other Adverse Effects: This material is alkaline and if released into water or moist soil will cause an increase in pH.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name:	Hydrated Lime
Class:	Not applicable.
UN Number:	30111604
Packing Group:	Not applicable.
Label Code:	Not applicable.

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name:	Hydrated Lime
Class:	Not applicable.
UN Number:	30111604
Packing Group:	Not applicable.
Label Code:	Not applicable.
Other:	When transported by air only: Hazard Class 8-Corrosive When transported by air only: Packing Group III

Special Precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises: When being transported by air, hydrated lime is classified in the Department of Transportation (DOT) regulations as a hazardous material. (49 CFR 172.101). For aircraft transport only, Calcium hydroxide is classified as Hazard Class 8-Corrosive, UN1910, Packing Group III. For passenger aircraft, the maximum net quantity allowed per container is 25 kg. For cargo aircraft the maximum net quantity allowed per container is 100kg. For quantities greater than 25kg up to and including 100kg, the container shall be labeled with CARGO AIRCRAFT ONLY. Because express carriers (i.e., Federal Express, Airborne Express, and United Parcel Service) ship by air, hydrated lime presented to these carriers for shipment must be packaged, marked, and labeled in accordance with IATA requirements, and must be accompanied by the appropriate shipping documentation. Only personnel trained and certified under applicable DOT Hazardous Materials Regulations (contained in Title 49 of the Code of Federal Regulations) may prepare any hydrated lime product for air transport. Hydrated lime is not classified as a hazardous material by DOT when transported by means other than air.

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)
The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)
The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States
This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

No components are listed.

State Regulations

Massachusetts
US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Quartz	14808-60-7	E

Note: E = Extraordinarily Hazardous Substance

New Jersey
US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Quartz	14808-60-7	SHHS

Note: SHHS = Special Health Hazard Substance

Pennsylvania
US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Quartz	14808-60-7	Listed.

California
California Prop 65:

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

Section 16: OTHER INFORMATION

Disclaimer:
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 their own particular use.

Date of Preparation of SDS:	August 22, 2019
Version:	1.0