

Name of the product

Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

SECTION 1: Identification

1.1. Product identifier

Trade Name

CALSAFE®

Other names / Synonyms

Hi Calcium Lime Slurry; Slurried Lime; Lime Slurry; Carbide Lime Slurry; Acetylene Lime Slurry; Milk of Lime; Hydrated Lime – Slurry Form.

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

Relevant identified uses of the substance or mixture

Water treatment; acid neutralization; flue gas treatment, caustic agent, pH adjustment, acid gas absorption, construction

Uses advised against

None identified.

1.3. Details of the supplier of the safety data sheet

Company and address

Carmeuse Americas CA

PO Box 190

ON N5C 3K5 Ingersoll

Canada

Phone: (519) 423-6283

Fax: (519) 423-6545

<https://www.carmeuse.com/na-en>

Emergency telephone number

In an emergency call 911

Infotrac: (800) 535-5053 (24hr/7days a week)

See also section 4 "First aid measures".

SECTION 2: Hazard(s) identification

Classified according to WHMIS 2022.

2.1. Classification of the substance or mixture

Skin Corr. 1; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.

STOT SE 3; H335, May cause respiratory irritation.

Carc. 1A; H350i, May cause cancer by inhalation.

2.2. Label elements

▼ Hazard pictogram(s)



Signal word

Danger

▼ Hazard statement(s)

Causes severe skin burns and eye damage. (H314)

May cause respiratory irritation. (H335)

May cause cancer by inhalation. (H350i)

Precautionary statement(s)

General

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)



Name of the product

Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

▼ Prevention

- Obtain special instructions before use. (P201)
- Do not breathe vapour/mist. (P260)
- Use only outdoors or in a well-ventilated area. (P271)
- Wear eye protection/protective gloves/protective clothing. (P280)

▼ Response

- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301+P330+P331)
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. (P303+P361+P353)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
- IF exposed or concerned: Get medical advice/attention. (P308+P313)
- Immediately call a POISON CENTER/doctor. (P310)

Storage

- Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
- Store locked up. (P405)

▼ Disposal

- Dispose of contents/container in accordance with local regulation (P501)

▼ Hazardous substances

- Calcium hydroxide
- Silica-crystalline quartz

▼ Additional labelling

- Restricted to professional users.

2.3. Other hazards

▼ Additional warnings

- This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Water	CAS No.: 7732-18-5	Balance%		
Calcium hydroxide	CAS No.: 1305-62-0	10-42%	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

Crystalline Silica is reported as total silica and not just the respirable fraction. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4: First-aid measures

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4.1. Description of first aid measures

General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.



Name of the product

Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

Skin contact

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment.

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable.

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact a poison centre in order to obtain further advice. See section 1 "Emergency telephone number".

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Avoid inhalation of vapours from spilled material.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections



Name of the product

Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

See section 13 "Disposal considerations" on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. ▼ Precautions for safe handling

Avoid direct contact with the product.
Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

No specific requirements

Incompatible materials

Strong acids
reactive fluoridated compounds
reactive brominated compounds
reactive powdered metals
reactive phosphorous compounds
Organic acid anhydrides
interhalogen compounds

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ALBERTA

Calcium hydroxide

Long term exposure limit (8 hours) (mg/m³): 5

Annotations:

3 = Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.

Occupational Health and Safety Code 2009 Order, Alta Reg 87/2009 (revised in 2018)

BRITISH COLUMBIA

Calcium hydroxide

Time-Weighted Average Limit (TWA): 5 mg/m³

OHS Regulation Part 5: Chemical Agents and Biological Agents.

ONTARIO

Calcium hydroxide

Time-Weighted Average Limit (TWA): 5 mg/m³

Regulation 833 (Control of Exposure to Biological or Chemical Agents) and Ontario Regulation 490/09 (Designated Substances)

QUEBEC

Calcium hydroxide

Long term exposure limit (8 hours) (mg/m³): 5

Regulation respecting occupational health and safety (Chapter S-2.1, r. 13)



Name of the product Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

SASKATCHEWAN

Calcium hydroxide

Long term exposure limit (8 hours) (mg/m³): 5

Short term exposure limit (15 minutes) (mg/m³): 10

The Occupational Health and Safety Regulations, 2020, Chapter S15.1 Reg 10.

8.2. ▼ Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

▼ Appropriate technical measures

Do not recirculate outlet air that contain the substances.

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Ensure that eyewash stations and safety showers are located within easy reach.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

▼ Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally



Wash contaminated clothing before reuse.

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

Respiratory Equipment

Type	Class	Colour	Standards
Respiratory protection is not needed in the event of adequate ventilation.			

Skin protection

Recommended	Type/Category	Standards	
Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester.	-	-	
Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	



PRODUCT SAFETY DATA SHEET

Conforms to Hazardous Products Regulations (SOR/2022-272)

Name of the product Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Cotton/Nitril	-	> 240	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
Safety glasses with side shields.	



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid
Suspension in water

Colour

White, Light gray

Odour

None

Odour threshold (ppm)

Not applicable

pH

-

pH in solution

12.4 (%)

▼ Density (g/cm³)

-

Relative density

1.06-1.38 (20 °C)

Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

Dynamic viscosity

500-780 mPa.s (40 °C)

Phase changes

Melting point (°C)

0

Boiling point (°C)

100

Vapour pressure

2.3 kPa (20 °C)

Relative vapour density

0.62

Decomposition temperature (°C)

Not applicable

Evaporation rate (n-butylacetate = 100)

No data available

Data on fire and explosion hazards

Flash point (°C)

Not applicable

Flammability (°C)

Not applicable



Name of the product

Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

Auto-ignition temperature (°C)

No data available

Explosion limits (% v/v)

Not applicable - based on structure

Solubility in water

Product is a suspended solid in water

n-octanol/water coefficient (LogKow)

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Dust explosion class

St0 (No explosion)

Evaporation rate (n-butylacetate = 100)

No data available

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Storage in the open is not recommended.

10.5. Incompatible materials

Strong acids

reactive fluoridated compounds

reactive brominated compounds

reactive powdered metals

reactive phosphorous compounds

Organic acid anhydrides

interhalogen compounds

10.6. ▼ Hazardous decomposition products

Thermal decomposition may produce corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Product/substance	Calcium hydroxide
Test method:	OECD 425
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	> 2000 mg/kg

Product/substance	Calcium hydroxide
Test method:	OECD 402
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	>2500 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage.



Name of the product

Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

▼ Carcinogenicity

May cause cancer by inhalation.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

▼ Long term effects

Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

No data available.

12.2. ▼ Persistence and degradability

Based on available data, the classification criteria are not met.

12.3. ▼ Bioaccumulative potential

Based on available data, the classification criteria are not met.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

None of the components are listed

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

Name of the product
Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping	14.3 nameHazard class(es)	14.4 PG*	14.5 Env**	Other information:
TDG	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. ▼ Canadian lists

▼ DSL / NDSL

Calcium hydroxide is listed

15.4. ▼ Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

15.5. Demands for specific education

No specific requirements.

Additional information

If this product is sold in retail, it must be delivered with child-resistant fastening.

15.7. Chemical safety assessment

No

Sources

Hazardous Products Regulations (SOR/2022-272)

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H315, Causes skin irritation.

H318, Causes serious eye damage.

H335, May cause respiratory irritation.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ANSI = American National Standards Institute

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

DSL = Domestic Substances List

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HHNOC = Health Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

Name of the product
Lime Slurry

Revision Date: January 2024 Version: 3.0/EN

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NDSL = Non-domestic substances list

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PHNOC = Physical Hazards Not Otherwise Classified

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

SCL = A specific concentration limit.

SOR = Statutory Orders and Regulations

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TDG = Transportation of Dangerous Goods

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

WHIMS = Workplace Hazardous Materials Information System

▼ Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by WHMIS 2022

The classification of the mixture in regard of skin corrosion and serious eye damage is based on the pH-criterion given by WHMIS 2022.

▼ Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: CA-en

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