

Limeco, Inc.

Material Safety Data Sheet

Material Name: Carbide Lime Slurry

SDS #: 001085

*** Section 1 – IDENTIFICATION ***

Product Identifier: CARBIDE LIME SLURRY

Other means of identification

Calcium hydrate, calcium hydroxide, carbide lime, generator slurry, hydrated lime, lime hydrate, lime sludge, lime slurry, slaked lime,

Product Use

Soil Stabilization, Acid neutralization

Synonym

Calcium hydrate, calcium hydroxide, carbide lime, generator slurry, hydrated lime, lime cake, lime hydrate, lime sludge, lime slurry, slaked lime,

*** Section 2 - HAZARD IDENTIFICATION ***

Classification in accordance with 29 CFR 1910.1200

Skin corrosion/irritation – Category 2
Serious eye damage/eye irritation – Category 1
Specific Target Organ Toxicity (Single Exposure) – Category 1
Specific Target Organ Toxicity (Repeated Exposure) – Category 2

Signal Word

WARNING

Hazard Statement(s)

Causes eye damage.
Causes skin irritation.

Precautionary Statement(s)

Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

Wear eye or face protection. Wash hands thoroughly after handling.

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage

Not applicable.

Disposal

Not applicable.

Hazard(s) Not Otherwise Classified

None know.

*** Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS ***

Substance/Mixture

Mixture

Other Means of Identification

Activated lime, bell mine, calcium hydrate, carbide lime, generator slurry, hydrated lime, lime cake, lime hydrate, lime sludge, lime slurry, lime water, slaked lime, whitewash

CAS Number/Other Identifiers

CAS Number

Not applicable.

Product Code

001085

CAS	Component	Percent
7732-18-5	WATER	40-70
1305-62-0	Calcium Dihydroxide	30-60

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.

Occupational exposure limits, if available, are listed in Section 8.

***** Section 4 - FIRST AID MEASURES *****

Description of Necessary Measures

Eyes

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. IT may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most Important Symptoms/Effects

Potential Acute Health Effects

Eye Contact

Causes serious eye irritation.

Frostbite

Try to warm up the frozen tissues and seek medical attention.

Ingestion

Irritating to mouth, throat and stomach.

Over-Exposure Signs/Symptoms

Eye Contact

Adverse symptoms may include the following:

Pain or irritation

Watering

Redness

Indication of Immediate Medical Attention and Special Treatment

Notes to Physician

Tread symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Protection of First-Aiders

No action shall be taken involving any personal risk or without suitable training. IT may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

***** Section 5 - FIRE-FIGHTING MEASURES *****

Suitable Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous Thermal Decomposition Products

Decomposition products may include the following materials:

Metal Oxide/Oxides

Special Protective Actions for Fire-Fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special Protective Equipment for Firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

***** Section 6 - ACCIDENTAL RELEASE MEASURES *****

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For Emergency Responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For Non-Emergency Personnel".

Environmental Precautions

Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and Materials for Containment and Cleaning Up

Small Spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large Spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

***** Section 7 - HANDLING and STORAGE *****

Precautions for Safe Handling

Protective Measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on General Occupational Hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for Safe Storage, including any Incompatibilities

Store and handle in accordance with all current regulations and standards. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10), food and drink. Keep container tightly closed and sealed until ready for use.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

* * * Section 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION * * *

Control Parameters

Occupational Exposure Limits

Calcium Dihydroxide (1305-62-0)

OSHA PEL (United States, 6/2010)

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

TWA: 15 mg/m³ 8 hours. Form: Total dust

ACGIH TLV (United States, 3/2012)

TWA: 5 mg/m³ 8 hours.

NIOSH REL (United States, 1/2013)

TWA: 5 mg/m³ 10 hours.

OSHA PEL 1898 (United States, 3/1989)

TWA: 5 mg/m³ 8 hours.

Appropriate Engineering Controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental Exposure Controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual Protection Measures, such as Personal Protective Equipment

Hygiene Measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes/Face Protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin Protection

Hand Protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body Protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin Protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

***** Section 9 - PHYSICAL and CHEMICAL PROPERTIES *****

Physical State:	Liquid. {solid or slurry (thick liquid suspension in water)}	Gas Density (lb/ft3):	Only water values: 1 (water)
Color:	Grayish-white	Critical Temperature:	Not Available
Odor:	Odorless, but inhalation of dust can be irritating	Odor Threshold:	Not Available
pH:	Not Available	Evaporation Rate:	Not Available
Boiling Point:	Dissociates at 580C (1076F) to Calcium Oxide and Water	Melting/Freezing Point:	2570C (4658F) for Calcium Oxide
Decomposition Temperature:	Not Available		
Vapor Pressure:	Not Available	Viscosity:	Not Available
Vapor Density (air=1):	Not Available	Flammability (solid, gas):	Not Available
Water Solubility:	Not Available	Flash Point:	Not Available

***** Section 10 - STABILITY and REACTIVITY *****

Reactivity

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

Chemical Stability

The product is stable.

Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid

No specific data.

Incompatible Materials

Highly reactive or incompatible with the following materials: metals.

Hazardous Decomposition

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization

Under normal conditions of storage and use, hazardous polymerization will not occur.

***** Section 11 – TOXICOLOGICAL INFORMATION *****

Acute and Chronic Toxicity

Component Analysis – LD50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Calcium Dihydroxide (1305-62-0)

Acute Toxicity

Oral Rat 7340 mg/kg

Irritation/Corrosion

Eyes – Severe irritant Rabbit 10 milligrams

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive Toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on Likely Routes of Exposure

Potential Acute Health Effects

Inhalation

No known significant effects or critical hazards.

Ingestion

Irritating to mouth, throat and stomach.

Skin Contact

No known significant effects or critical hazards.

Eye Contact

Causes serious eye irritation.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Inhalation

No specific data.

Ingestion

No specific data.

Skin Contact

No specific data.

Eye Contact

Adverse symptoms may include the following:

Pain or irritation

Watering

Redness

Delayed and Immediate Effects and Chronic Effects from Short/Long Term Exposure

Short Term Exposure

Potential Immediate Effects

Not available.

Potential Delayed Effects

Not available.

Long Term Exposure

Potential Immediate Effects

Not available.

Potential Delayed Effects

Not available.

Potential Chronic Health Effects

Not available.

General

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Developmental Effects

No known significant effects or critical hazards.

Fertility Effects

No known significant effects or critical hazards.

Numerical Measures of Toxicity

Acute Toxicity Estimates

Not available.

***** Section 12 - ECOLOGICAL INFORMATION *****

Toxicity

Component Analysis – Aquatic Toxicity

Product/Ingredient: Calcium Dihydroxide

Result: Acute LC50 33884.4 µg/l Fresh Water

Species: Fish – Clarias gariepinus – Fingerling

Exposure: 96 hours

Persistence and Degradability

Not available.

Bioaccumulative Potential

Not available.

Mobility in Soil

Soil/water partition coefficient (K_{oc})

Not available.

Other Adverse Effects






No known significant effects or critical hazards.

***** Section 13 - DISPOSAL CONSIDERATIONS *****

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

*****Section 14 - TRANSPORTATION INFORMATION *****

	DOT	TDG	MEXICO	IMDG	IATA
UN Number	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
UN Proper Shipping Name	N/A	N/A	N/A	N/A	N/A
Transport Hazard Class(es)					
Packing Group	N/A	N/A	N/A	N/A	N/A
Environmental	No	No	No	No	No
Additional Information	N/A	N/A	N/A	N/A	N/A

“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

Special Precautions for User

Transport Within User’s Premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

*** * * Section 15 - REGULATORY INFORMATION * * ***

Component Analysis

U.S. Federal Regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)

Not Listed

Clean Air Act Section 602 Class I Substances

Not Listed

Clean Air Act Section 602 Class II Substances

Not Listed

DEA List I Chemicals (Precursor Chemicals)

Not Listed

DEA List II Chemicals (Essential Chemicals)

Not Listed

SARA 302/304

Composition/Information on Ingredients

No products were found.

SARA 304 RQ

Not applicable.

SARA 311/312

Classification

Immediate (acute) health hazard

Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immediate (Acute) Health Hazard	Delayed (Chronic) Health Hazard
Calcium Dihydroxide	30 – 60	No	No	No	Yes	No

State Regulations

Massachusetts

The following components are listed: CALCIUM HYDROXIDE

New York

None of the components are listed.

New Jersey

The following components are listed: CALCIUM HYDROXIDE; HYDRATED LIME

Pennsylvania

The following components are listed: CALCIUM HYDROXIDE (CA(OH)₂)

Canada Inventory

All components are listed or exempted.

International Regulations

International Lists

Australia Inventory (AICS): All components are listed or exempted.

China Inventory (IECSC): All components are listed or exempted.

Japan Inventory: All components are listed or exempted.

Korea Inventory: All components are listed or exempted.

Malaysia Inventory (EHS Register): All components are listed or exempted.)

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines Inventory (PICCS): All components are listed or exempted.)

Taiwan Inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule I Chemicals

Not listed

Chemical Weapons Convention List Schedule II Chemicals

Not listed

Chemical Weapons Convention List Schedule III Chemicals

Not listed

Canada

WHMIS (Canada)

Class E: Corrosive material

CEPA Toxic Substances: None of the components are listed.

Canadian ARET: None of the components are listed.

Canadian NPRI: None of the components are listed.

Alberta Designated Substances: None of the components are listed.

Ontario Designated Substances: None of the components are listed.

Quebec Designated Substances: None of the components are listed.

***** Section 16 - OTHER INFORMATION *****

Key to Abbreviations

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

ACGIH – American Conference of Governmental Industrial Hygienists

AIHA – American Industrial Hygiene Association

CAS – Chemical Abstract Services

CEPA – Canadian Environmental Protection Act

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act (EPA)

CFR – United States Code of Federal Regulations

CPR – Controlled Products Regulations

DSL – Domestic Substances List

GWP – Global Warming Potential

IARC – International Agency for Research on Cancer

ICAO – International Civil Aviation Organization

Inh – Inhalation

LC – Lethal concentration
LD – Lethal dosage
NDSL – Non-Domestic Substances List
NIOSH – National Institute for Occupational Safety and Health
TDG – Canadian Transportation of Dangerous Goods Act and Regulations
TLV – Threshold Limit Value
TSCA – Toxic Substances Control Act
WEEL – Workplace Environmental Exposure Level
WHMIS – Canadian Workplace Hazardous Material Information System

References

Not Available

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