

Offer Sheet

Product	Calcium Oxide
Quantity	Packed in 1,700 lb. supersacks & 50 lb. bags
Net weight	125,600 lbs.
Manufacture date	2023 (1 year shelf life)
Availability	One time
Location	Delivered
Date	6/16/25
COA & SDS	Attached below

Food grade calcium oxide (CaO), also known as quicklime, is a high-purity, reactive compound with a variety of commercial applications, especially in the food and related industries. Here are its primary uses:

1. Desiccant and Moisture Absorbent

- Calcium oxide is widely used as a desiccant in food packaging to absorb moisture and prolong shelf life, protecting products such as tea, spices, and other dry goods from humidity and spoilage.

2. Food Processing and Additive

- It serves as a food additive for pH regulation and acidity control, helping stabilize and preserve certain foods.
- Used in sugar refining to remove impurities and clarify sugar solutions¹.
- Acts as a processing aid in the preparation of certain foods, such as in the treatment of corn for masa production (nixtamalization), where it helps release nutrients and improve texture.

3. Shelf-Life Extension and Disinfection

- Heated calcium oxide (such as from scallop shell powder) exhibits strong microbicidal activity, making it useful as an additive to extend the shelf life of food products by inhibiting the growth of bacteria, fungi, and viruses.

4. Animal Feed and Agriculture

- Used as a calcium supplement in poultry and livestock feed, contributing to animal health and nutrition.
- Applied to neutralize acidic soils in agriculture, improving soil fertility and crop yields.

5. Water and Waste Treatment

- Employed in water treatment to adjust pH and remove impurities, ensuring safe and stable water supplies for food and beverage processing.

6. Other Industrial Uses Related to Food

- Utilized as a drying agent in the storage and shipping of food, tea, and other moisture-sensitive products.
- Involved in the manufacture of glass and ceramics that may be used in food packaging or processing equipment.

7. Regulatory and Safety Notes

- Food grade calcium oxide meets stringent purity standards (such as FCC), ensuring it is safe for use in food and beverage applications.

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Click here for: [Surplus Inventory](#)

Solvent-Systems.com

CERTIFICATE OF ANALYSIS

Mississippi Lime Company
HWAY 61 S, Ste Genevieve, MO 63670 USA

SHIP DATE: 01/27/2023

SHIPPER #: 768896-1

PO #: 441492

Mfg. Date: 01/18/2023

Best Used By: 01/18/2024

Product : VITACAL® H-50# - 74862

LOT NUMBER : VCH011823

PROPERTIES	SPECIFICATIONS	ANALYSIS	TEST METHOD
-325 MESH -- %	(96.5 min)	99.2	MLCO-72
Acid Insolubles Analysis -- %	(0.5 max)	<0.5	F.C.C. 13th Edition
Arsenic Analysis -- %	(3.0 max)	<3.0	F.C.C 13th Edition
Carbonate		PASS	F.C.C.13th Edition
Fluoride -- ppm	(50 max)	31	MLCO-38C
Identification		PASS	F.C.C 13th Edition
Lead -- ppm	(2 max)	<2	F.C.C 13th Edition
Magnesium & Alkali Salts Analysis -- %	(4.8 max)	<4.8	F.C.C 13th Edition
Moisture -- %	(1.0 max)	0.3	MLCO-43
Total Ca(OH) ₂ (Assay) -- %		98.6	ASTM C1271-99

THIS HYDRATED LIME MEETS THE THIRTEENTH EDITION OF THE FOOD CHEMICALS CODEX SPECIFICATIONS

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1. Identification

Product identifier	VitaCal ® H Food Codex Grade Calcium Hydroxide
Other means of identification	None.
Recommended use	For all direct and indirect food contact applications of calcium hydroxide by 21 CFR 184.1205 and related global regulations.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer:	Mississippi Lime Company, LLC dba MLC
Address:	16147 US Highway 61 Ste Genevieve, MO 63670
Phone Number:	(800) 437-5463
24 Hour Emergency	(866) 519-4752
Contact Number:	
Access code:	336393

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 1 Specific target organ toxicity, single exposure Category 3 respiratory tract irritation
Environmental hazards	Hazardous to the aquatic environment, acute hazard Category 3
OSHA defined hazards	Not classified.
Label elements	



Signal word	Danger
Hazard statement	Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. Harmful to aquatic life.
Precautionary statement	
Prevention	Avoid breathing dust. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.
Response	If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium hydroxide	1305-62-0	97 - 100
Calcium carbonate	471-34-1	≤ 1

Composition comments All concentrations are in percent by weight. Components not listed are either non-hazardous or are below reportable limits.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Skin irritation. May cause redness and pain. Rash. Dermatitis.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted. The product is nonflammable and does not support combustion.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Prevent product from entering drains. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not get this material in contact with eyes. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium hydroxide (CAS 1305-62-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 Permissible Exposure Limits (PEL) for Mineral Dusts (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value
Calcium hydroxide (CAS 1305-62-0)	TWA	5 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Calcium hydroxide (CAS 1305-62-0)	TWA	5 mg/m3	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear dust-resistant safety goggles.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Powder.
Color	White.

Odor None.

Odor threshold Not available.

pH 12.4 In aqueous solution or slurry form

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Does not flash

Evaporation rate Not available.

Flammability (solid, gas) Non flammable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) 1.7 g/l (25 °C)

Solubility (solvents) None

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Does not ignite.

Decomposition temperature 1004 °F (540 °C)

Viscosity Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

10. Stability and reactivity

Reactivity Reacts violently with strong acids.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials. Do not mix with other chemicals.

Incompatible materials Acids. Oxidizing agents. Maleic anhydride. Nitroethane. Nitromethane. Nitroparaffins. Nitropropane. Phosphorus.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes skin irritation.

Eye contact Causes serious eye damage.

Ingestion May cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Skin irritation. May cause redness and pain. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
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Calcium carbonate (CAS 471-34-1)

Acute**Oral**

LD50

Rat

6450 mg/kg

Calcium hydroxide (CAS 1305-62-0)

Acute**Oral**

LD50

Rat

7340 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

Chronic effects

Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life.

Components	Species	Test Results
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Calcium carbonate (CAS 471-34-1)

Aquatic**Acute**

Fish

LC50

Western mosquitofish (*Gambusia affinis*) > 56000 mg/l, 96 Hours

Calcium hydroxide (CAS 1305-62-0)

Aquatic**Acute**

Fish

LC50

Zambezi barbel (*Clarias gariepinus*)

33.9 mg/l, 96 hours

Persistence and degradability

The product contains inorganic compounds which are not biodegradable.

Bioaccumulative potential

No data available.

Mobility in soil

This product is slightly water soluble and may disperse in soil.

Other adverse effects

No data available.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.	
CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed.	
SARA 304 Emergency release notification	Not regulated.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)	Not listed.	
Toxic Substances Control Act (TSCA)	All components of the mixture on the TSCA 8(b) inventory are designated "active".	
Superfund Amendments and Reauthorization Act of 1986 (SARA)		
SARA 302 Extremely hazardous substance	Not listed.	
SARA 311/312 Hazardous chemical	Yes	
Classified hazard categories	Skin corrosion or irritation Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure)	
SARA 313 (TRI reporting)	Not regulated.	
Other federal regulations		
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Not regulated.	
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	Not regulated.	
Safe Drinking Water Act (SDWA)	Not regulated.	

US state regulations

US. Massachusetts RTK - Substance List

Calcium carbonate (CAS 471-34-1)

Calcium hydroxide (CAS 1305-62-0)

US. New Jersey Worker and Community Right-to-Know Act

Calcium carbonate (CAS 471-34-1)

Calcium hydroxide (CAS 1305-62-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium carbonate (CAS 471-34-1)

Calcium hydroxide (CAS 1305-62-0)

US. Rhode Island RTK

Calcium carbonate (CAS 471-34-1)

Calcium hydroxide (CAS 1305-62-0)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 11-October-2017

Revision date 04-April-2025

Version # 06

HMIS® ratings Health: 3
Flammability: 0
Physical hazard: 0

Disclaimer Mississippi Lime Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.



Discovering what's possible with calcium

VitaCal® H

Food Grade Calcium Hydroxide

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Mississippi Lime VitaCal® H Calcium Hydroxide is a high purity product which meets or exceeds the Food Chemical Codex specifications. Because of purity and consistency, food processing chemists have specified Mississippi Lime VitaCal® products for more than 40 years. With ultra low lead (<0.1 ppm) and arsenic (<0.3 ppm), VitaCal® H is one of the highest purity calcium hydroxides available for all of your Food Chemical Codex applications.

TYPICAL CHEMICAL PROPERTIES	
Ca(OH) ₂ - Total	98.5%
Ca(OH) ₂ - Available	97.0%
Calcium	53.2%
Free Moisture	0.5%
CO ₂	0.5%
Sulfur (S)	0.01%
Crystalline Silica	<0.1%
Lead (Pb)	<0.1 ppm
Arsenic (As)	<0.3 ppm
Fluoride (F)	40 ppm
Magnesium & Alkali Salts	0.8%
Acid Insoluble Substances	<0.5%
Silica (Si)	0.4%
Alumina (Al)	0.1%
Iron (Fe)	0.03%
Magnesium (Mg)	0.3%
Phosphorus (P)	30 ppm
Manganese (Mn)	10 ppm

- ✓ Certified to FCC 12th Edition
- ✓ Certified to Kosher-Pareve
- ✓ Certified to NSF Standard 60
- ✓ Certified to AWWA standard B202-13

VitaCal® - Purity is the Difference

TYPICAL PHYSICAL PROPERTIES	
Specific Gravity	2.3
Dry Brightness (L)	94
Median Particle Size	4 micron
pH	12.4
BET Surface Area	17.5 m ² /g
-100 Mesh (150 µm)	99.9%
-200 Mesh (75 µm)	99.8%
-325 Mesh (45 µm)	98.0%
Apparent Dry Bulk Density - Loose	26 lbs./ft ³
Apparent Dry Bulk Density - Packed	43 lbs./ft ³

FOOD CHEMICALS CODEX SPECIFICATIONS, 12 th ED.	
Assay Ca(OH) ₂	95.0%- 100.5%
Carbonate	Passes Test
Magnesium & Alkali Salts	4.8% max
Fluoride	50 ppm max
Lead	2 ppm max
Arsenic	3 ppm max
Acid Insoluble Substances	0.5% max



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Web site: www.mississippilime.com

All information provided and recommendations made herein are intended to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use in order to make their own final decision regarding suitability. We do not guarantee results, freedom from patent infringement, or suitability of resultant products for any suggested application with respect to the use of any formula or material described herein.

Ed. 9/2020