SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

PRODUCT IDENTIFIER:	Calcium Hydroxide
PRODUCT CODE:	Not specified
RECOMMENDED USE:	Not specified
UFI NUMBERS:	Not specified

MANUFACTURER/SUPPLIER INFORMATION

COMPANY NAME:	Travertine Technologies
ADDRESS:	5311 Western Ave Ste 100, Boulder, Colorado, 80301, United States
PHONE NUMBER:	1-720-577-3122
EMAIL/WEBSITE:	lab@travertinetech.com | https://www.travertinetech.com
EMERGENCY CONTACT:	1-720-577-3122

SECTION 2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the OSHA's Hazard Communication Standard at 29 CFR 1910.1200

H315	**Category 2**
H318	**Category 1**
H335	**Category 3**
H402	**Category 3**

2.2 Label Elements

Signal Word Danger

Hazard Statements

HAZARD CODE	STATEMENT
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation
H402	Harmful to aquatic life

Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands [and ...] thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
P317 - Get emergency medical help.
P319 - Get medical help if you feel unwell.
P321 - Specific treatment (see ... on this label).
P405 - Store locked up.
P501 - Dispose of contents/container to ...
P264+P265 - Wash hands [and ...] thoroughly after handling. Do not touch eyes.
P302+P352 - IF ON SKIN: wash with plenty of water/...
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P332+P317 - If skin irritation occurs: Get medical help.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P305+P354+P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Composition/Information on Ingredients

CAS NO.	CHEMICAL NAME	CONCENTRATION (%)
1305-62-0	Calcium hydroxide	>95

SECTION 4. FIRST AID MEASURES

4.1 Description of First Aid Measures

INHALATION : If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, administer oxygen. Seek immediate medical attention if symptoms persist.

SKIN CONTACT : Take off immediately all contaminated clothing. Rinse skin with water or shower. If irritation develops after exposure to this material, seek medical attention promptly.

EYE CONTACT : Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately consult a physician for medical advice.

INGESTION : Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Immediately consult a physician or poison control center for further medical advice and treatment.

4.2 Most Important Symptoms and Effects

SYMPTOMS EFFECTS : If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, administer oxygen. Seek immediate medical attention if symptoms persist.

4.3 Indication of Any Immediate Medical Attention

GENERAL :

- Treat symptomatically. If you feel unwell or symptoms persist, get medical advice/ attention. Show this Safety Data Sheet to the physician.
- Immediate medical attention may be required depending on exposure. Treatment should be directed at the clinical condition of the patient, bring this SDS to the healthcare provider.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media

SUITABLE AGENTS : Foam is suitable for larger fires, creating a blanket to smother the flames and pre - vent reignition. It is effective on Class A and B fires, providing a cooling and suppressing action.

UNSUITABLE AGENTS : Water jet is unsuitable as it can spread the material, increasing the surface area and potentially intensifying the fire. It may also cause splashing and create a steam explosion hazard.

5.3 Advice for Firefighters

GENERAL : Water jet is unsuitable as it can spread the material, increasing the surface area and potentially intensifying the fire. It may also cause splashing and create a steam explosion hazard.

PROTECTIVE EQUIPMENT : Water jet is unsuitable as it can spread the material, increasing the surface area and potentially intensifying the fire. It may also cause splashing and create a steam explosion hazard.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

GENERAL : Avoid generation of dusts. Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up dry, then dispose of properly. Clean up the affected area.

6.3 Methods and Materials for Containment and Cleaning Up

GENERAL :	Cover drains to prevent the substance from entering waterways. Collect, bind, and pump off spills. Observe material restrictions. Take up dry, and dispose of properly. Clean up the affected area, avoiding dust generation.
SMALL SPILLS :	Contain the spilled material immediately by creating a barrier with inert materials like sand or soil to prevent further spreading and potential environmental contamination. Minimize dust generation during containment.
LARGE SPILLS :	Emergency response: Immediately isolate the spill area and deny entry. Ensure responders wear appropriate personal protective equipment, including eye protection and respiratory protection if dust is present.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

GENERAL :	Ensure adequate ventilation when handling this product to minimize inhalation of dust. If engineering controls are insufficient, wear respiratory protection that is appropriate for the concentration of airborne particles. Regular cleaning of work areas will also help to prevent dust accumulation and reduce exposure.

7.2 Conditions for Safe Storage

GENERAL :	Store in a dry, well-ventilated place. Protect from moisture and incompatible materials. Keep containers tightly closed when not in use to prevent absorption of atmospheric carbon dioxide, which can degrade the substance. Ensure proper labeling and segregation from other materials to avoid unintended reactions or contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits Table

CAS NO.	CHEMICAL	REGULATION	METHOD	LIMIT VALUE
1305-62-0	Calcium hydroxide	Occupational Safety and Health	REL-TWA (Time Weighted Average)	5 mg/m^3

CAS NO.	CHEMICAL	REGULATION	METHOD	LIMIT VALUE
		Administration (OSHA)		
1305-62-0	Calcium hydroxide	The National Institute for Occupational Safety and Health (NIOSH)	Recommended Exposure Limit	TWA 5 mg/m3

8.2 Individual Protection Measures

Protective equipment

INHALATION : Ensure adequate ventilation, including local exhaust, to maintain acceptable exposure levels. If inhaled, move to fresh air; seek medical attention if respiratory irritation or breathing difficulties persist.

EYE PROTECTION : Wear appropriate eye protection, such as safety goggles or a face shield, to prevent contact. If eye contact occurs, immediately flush eyes with plenty of water for at least 15 minutes.

HAND PROTECTION : Wear chemical resistant gloves (e.g., neoprene or natural rubber) during handling to prevent skin contact. If skin contact occurs, immediately wash the affected area with copious amounts of water for at least 15 minutes.

SKIN AND BODY PROTECTION : Wear appropriate personal protective equipment, including chemical-resistant gloves, safety glasses with side shields, and suitable protective clothing, to prevent skin and eye contact. If skin contact occurs, immediately flush with water for at least 15 minutes.

SKIN PROTECTION : To prevent skin contact, wear appropriate chemical-resistant gloves and clothing. If skin contact occurs, immediately wash the affected area with copious amounts of water for at least 15 minutes and seek medical attention if irritation persists.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

EVAPORATION RATE : Not specified

WATER SOLUBILITY : Soluble

FLASH POINT :	Not specified
SG DENSITY :	2.24 g/mL at 25 degC (77 degF) - lit.
UPPER EXPLOSIVE LIMIT :	Not specified
MELTING POINT :	Melting point/range: >= 450 degC (>= 842 degF) - Regulation (EC) No. 440/2008, Annex, A.1
DECOMPOSITION TEMPERATURE :	2,850 degC 5,162 degF - (decomposition)
MOLECULAR WEIGHT :	Not specified
VAPOUR PRESSURE :	Not specified
TOTAL VOC G L :	Not specified
STATE :	solid
APPEARANCE :	Form: powder Color: beige
PH :	12.4 - 12.6 at 20 degC (68 degF)
PH AS A SOLUTION :	Not specified
LOWER EXPLOSIVE LIMIT :	Not specified
BOILING POINT RANGE :	2,850 degC 5,162 degF - (decomposition)
AUTOIGNITION TEMPERATURE :	> 400 degC (> 752 degF) - Relative self-ignition temperature for solids
VOLATILES :	Not specified
RELATIVE VAPOUR DENSITY :	Not specified
VISCOSITY :	Not specified

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

REACTIVITY :	No hazardous reactions are expected if storage and handling instructions are fol - lowed. Based on structural properties, this material is not classified as an oxidizing agent.

CHEMICAL STABILITY :	This product is chemically stable under standard ambient conditions (room temperature). Ensure proper storage to maintain stability and prevent unintended reactions or degradation over time.
HAZARDOUS REACTIONS :	This material may react exothermically with hydrogen sulphide, light metals, phosphorus, organic nitro compounds, and acids. There is a risk of explosion if combined with anhydrides.
CONDITIONS TO AVOID :	To maintain stability and prevent unintended reactions, avoid conditions that promote dust formation. Additionally, this material should be protected from humidity to ensure its integrity.
INCOMPATIBLE MATERIALS :	This product is incompatible with strong acids. Contact with strong acids may cause a violent exothermic reaction, potentially leading to dangerous heat generation and spattering.
HAZARDOUS DECOMPOSITION :	In the event of a fire, refer to section 5 of the safety data sheet for specific information regarding potential hazardous decomposition products and appropriate firefighting measures.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity table

CAS NO.	CHEMICAL	RESULT	DOSE	SPECIES	EXPOSURE
1305-62-0	Calcium hydroxide	LD50	2000 mg/kg	Rat	Oral
1305-62-0	Calcium hydroxide	LC50	6.04 mg/l - 4 hr	Rat	Inhalation dust/mist
1305-62-0	Calcium hydroxide	LD50	2500 mg/kg	Rabbit	Dermal

11.1 Information on Toxicological Effects

TARGET ORGAN TOXICITY SINGLE :	Inhalation - May cause respiratory irritation. - Respiratory Tract
SKIN CONTACT :	Skin - Rabbit Result: Irritating to skin. (OECD Test Guideline 404)
SERIOUS EYE DAMAGE :	Eyes - Rabbit Result: Irreversible effects on the eye (OECD Test Guideline 405) Remarks: Risk of corneal clouding. Risk of blindness!

CARCINOGENICITY :	IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.
MUTAGENICITY :	Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Chromosome aberration test in vitro Test system: Human lymphocytes Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Table

CAS NO.	CHEMICAL	SPECIES	RESULT	VALUE	DURATION
1305-62-0	Calcium hydroxide	Aphanizomenon flos-aquae (Blue-Green Algae)	EC50	66000 ug/L	1
1305-62-0	Calcium hydroxide	Aphanizomenon flos-aquae (Blue-Green Algae)	EC50	84000 ug/L	22 hr
1305-62-0	Calcium hydroxide	Crangon septemspinosa (Bay Shrimp)	LC50	158000 ug/L	96 hr
1305-62-0	Calcium hydroxide	Poecilia reticulata (Guppy)	LC50	387000 ug/L	24 hr

12.2 Persistence and Degradability

GENERAL :	The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative Potential

BIOACCUMULATIVE POTENTIAL :	Does not bioaccumulate.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

APPROPRIATE DISPOSAL :	As per local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

14.1 UN Number

UN ID NUMBER:	Not applicable
SHIPPING NAME:	Not applicable
ENVIRONMENTAL HAZARDS :	Not applicable
SPECIAL PRECAUTIONS :	Not applicable

Transport Information

TRANSPORT MODE	SUB RISK	PACKAGING GROUP
Not applicable	Not applicable	Not applicable

SECTION 15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations

GENERAL :

The mixture contains chemicals that falls under the following regulatory Lists.

- Z-1 Table OSHA
- Pennsylvania Hazardous Substance List

SECTION 16. OTHER INFORMATION

16.1 Other Information

OTHER INFORMATION :

Revision Information

- Date of Current Revision: 2025-11-19
- Date of Original Creation: 2025-11-13

Abbreviations and Acronyms

- **CAS:** Chemical Abstracts Service
- **GHS:** Globally Harmonized System of Classification and Labelling of Chemicals
- **CLP:** Classification, Labelling and Packaging Regulation (EC) No. 1272/2008
- **OSHA:** Occupational Safety and Health Administration
- **ATE:** Acute Toxicity Estimate
- **STOT:** Specific Target Organ Toxicity
- **PBT:** Persistent, Bioaccumulative, Toxic
- **vPvB:** Very Persistent and Very Bioaccumulative

Key Literature References and Sources

- Data from manufacturer/supplier
- ECHA (European Chemicals Agency) database
- OSHA Hazard Communication Standard (29 CFR 1910.1200)
- Relevant scientific literature and toxicological databases

Training Advice

- Ensure employees are trained on safe chemical handling.
- Provide instruction on proper PPE use, storage, and emergency procedures.

This Safety Data Sheet complies with GHS requirements and relevant regulations.

POWERED BY: SDS

Generated: 2025-11-19