

**US LIME COMPANY – St Clair**  
**SAFETY DATA SHEET**

**1. Product and Company Identification**

**Product Name:** Calcium Hydroxide  
Ca(OH)<sub>2</sub>

**Other Means of Identification:** Hydrated Lime,

**Recommended Use:**

**Food Industry:** pickling lime,

**Building material industry:** mortar, white wash, plaster

**Chemical Industry:** manufacture of calcium stearate

**Steel Industry:** injected into the waste gas stream to neutralize acids (fluorides & chlorides)

**Environmental:** flue gas treatment, waste water treatment, sludge treatment

**Civil engineering:** soil stabilization to improve the quality of excessively plastic subgrade soils

**Drinking water / Sewage Treatment:** flocculant in water and sewage to remove smaller particles, raising pH of water so pipes won't corrode where the base water is acidic.

**List is not all inclusive.**

**Company Identification:**

US Lime Company – St Clair  
P.O. Box 160  
Marble City, OK 74945

Information: (918) 775-4466

Emergency: (800) 366-5106

**2. Hazards Identification**

**Hazard Classification:** Eye Damage Category- 1, Skin Irritation Category 2, Specific Single Exposure Category -0, Carcinogen Category -1.

**Emergency Overview:** Hydrated Lime is an odorless white or grayish-white material that has a bitter taste. It is used in mortar, plaster, cement and other building and paving materials. Contact can cause irritation to eyes, skin, respiratory system, and gastrointestinal tract.

**Potential Health Effects**

**Eyes:** Contact can cause mild to severe irritation or burning of eyes, including permanent damage.

**Skin:** Contact can cause severe irritation or burning of skin, especially in the presence of moisture. May cause skin redness, roughness, pain, dry skin, skin burns and blisters

**Ingestion:** This product can cause severe irritation or burning of gastrointestinal tract if swallowed.

**Inhalation:** In case of accident by inhalation, remove casualty to fresh air and keep at rest, may cause sore throat, coughing and mild to moderate burning sensation.

**Medical Conditions Aggravated by Exposure:** Contact may aggravate disorders of eyes, skin, gastrointestinal tract, and respiratory system.

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

**Signal Word:** Danger!

**Hazard Statements:** Danger! Causes skin irritation, Cause serious eye damage. May cause cancer through inhalation. May cause respiratory irritation.

**Symbols:**



**Precautionary Statements:**

Wear protective gloves and eye protection (Goggles or glasses with side shields recommended). Wash exposed skin thoroughly after handling. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Keep only in original container. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

If on skin; wash exposed skin with plenty of soap with water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse.

If in eyes: Rinse cautiously with water for several minutes. It is not recommended to wear contact lens, however if contact lens are present - Remove contact lenses if easy to do. Continue rinsing. Seek medical attention immediately.

In Inhaled: Remove person(s) to fresh air and keep comfortable for breathing. Seek medical attention if you feel unwell.

If exposed or concerned: Get medical advice.

Store in a corrosive resistant container. Do not store or ship in aluminum container.

Dispose of contents or containers in accordance with applicable regulations. Do not use water on material spills.

**Hazards not otherwise classified:** NONE

**Ingredients with unknown toxicity:** Not Applicable

**3. Composition/Information on Ingredients**

<b>Component</b>	<b>CAS #</b>	<b>% by weight</b>
Calcium Hydroxide	1305-62-8	>95%
Magnesium Oxide	1309-48-4	<2 %
Crystalline Silica	14808-60-7	<1%

**4. First Aid Measures**

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

**Skin:** Contact can cause severe irritation or burning of skin. Wash exposed area with large amounts of soap and water. Wear the proper clothing that will provide less direct contact with the person's skin. Seek medical attention immediately.

**Ingestion:** Do not induce vomiting. Seek medical attention immediately. Never give anything by mouth unless instructed to do so by medical personnel.

**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.

**Indication of any immediate medical attention and special treatment needed:** See first aid information above. Note to Physicians: Provide general supportive measures and treat symptomatically.

## **5. Fire Fighting Measures**

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.

**Hazardous Combustion Products:** NA.

**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.

**Special Protective Equipment and Fire Fighting Instructions:** Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Keep personnel away from and upwind of fire.

## **6. Accidental Release Measures**

### **Personal precautions, protective equipment and emergency procedures**

**Spill /Leak Procedures:** Do NOT use water on bulk material spills. Lime reacts violently with water, releasing heat. Use proper protective equipment.

**Small Spills:** Use dry methods to collect spilled materials. Avoid generating dust. Do not clean up with compressed air. Store collected materials in dry, sealed plastic or metal containers. Residue on surfaces may be water washed.

**Large Spills:** Use dry methods to collect spilled materials. Evacuate area downwind of clean-up operations to minimize dust exposure. Store spilled materials in dry, sealed plastic or metal containers.

### **Methods and materials for containment and cleaning up**

**Containment:** For large spills, as much as possible, avoid the generation of dusts. Prevent release to sewers or waterways.

**Cleanup:** Residual amounts of material can be flushed with large amounts of water. Equipment can be washed with either a mild vinegar and water solution, or detergent and water.

## **7. Handling and Storage**

Evacuate persons not wearing protective equipment from the area of the spill until clean-up is complete.

Collect powdered material in the most convenient and safe manner and deposit in sealed containers.

Avoid as much contact with the product as possible.

Ventilate and wash area after the clean-up is complete.

It may be necessary to contain and dispose of Calcium Hydroxide as a HAZARDOUS WASTE. Contact your State Department of Environmental Protection or regional office of the Federal EPA for specific recommendation

## **8. Exposure Controls/Personal Protection**

<b>Component</b>	<b>CAS #</b>	<b>Exposure Limits</b>
Calcium Hydroxide	1305-62-0	OSHA PEL: 15 mg/m <sup>3</sup> total 5 mg/m <sup>3</sup> respirable ACGIH TLV: 5 mg/m <sup>3</sup>
Magnesium Oxide	1309-48-4	OSHA PEL: 10 mg/m <sup>3</sup> ACGIH TLV: 10 mg/m <sup>3</sup>
Crystalline Silica	14808-60-7	OSHA PEL: 10 mg/m <sup>3</sup> divided by % quartz + 2 (respirable fraction) ACGIH TLV: 0.025 mg/m <sup>3</sup> (respirable)

**Engineering Controls:** Provide ventilation adequate to maintain PELs.

### **Individual Protection Measures**

**Respiratory Protection:** Use NIOSH/MSHA N95 approved respirators if airborne concentration exceeds PEL.

**Skin Protection:** Use appropriate gloves to prevent skin contact. Where there is a risk of skin contact, wear suitable clothing to prevent such contact.

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

**Other:** Eye wash fountain and emergency showers are recommended.

## **9. Physical and Chemical Properties**

**Formula:** Ca(OH)<sub>2</sub>

**Appearance:** White or grayish-white material.

**Physical State:** Solid

**Molecular Weight:** 74.10

**Odor:** Odorless

**Odor threshold:** Not applicable

**Melting Point:** 580 C

**Flash Point:** Not Applicable

**Evaporation Rate:** NA

**Flammability:** NA

**Vapor Pressure:** N/A

**Vapor Density:** N/A

**Relative Density:** NA

**Specific Gravity:** 2.24 at 20 degrees C

**Solubility in Water:** Slightly Soluble

**Auto-ignition temperature:** NA

**Decomposition temperature:** NA

**Viscosity:** NA

## **10. Stability and Reactivity**

**Reactivity:** Not generally reactive under normal conditions

**Chemical stability:** Stable under normal conditions

**Possibility of hazardous reactions:** Mixture with strong acids

**Conditions to Avoid:** None known

**Incompatibility:** Strong Acids

**Hazardous Decomposition Products:** Calcium Oxides

### **11. Toxicological Information:**

**Information on the likely routes of exposure:** Inhalation and ingestion

**Symptoms related to the physical, chemical and toxicological characteristics:** Nausea, Coffee Ground Emesis, Diarrhea, and Dermatitis

### **12. Ecological Information:**

**Overview:** This material is not to be expected to be harmful to the ecology

**Mobility:** No data

**Persistence and degradability:** Dissolved in water

**Bio accumulative:** This material shows no bioaccumulation effect or food chain concentration toxicity.

**Other adverse effects (such as hazardous to the ozone layer):** No data

### **13. Disposal Considerations:**

Dispose of in accordance with all applicable federal, state, and local environmental regulations. If this product as supplied, and unmixed, becomes a waste, it will not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act.

### **14. Transportation Information:**

**UN number:** Not regulated

**UN Proper shipping name:** Calcium Hydroxide

**Transport hazard class:** Not regulated for transport by US DOT.  
Not regulated for air transport by IATA

**Packing group:** Not regulated

**Environmental hazards (e.g. Marine pollutant) (Yes/No):** This material is alkaline and if released into water or moist soil will cause an increase in pH.

### **15. Regulatory Information:**

#### **EPA Regulations:**

RCRA Hazardous Waste Number: not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261): not classified

CERCLA Hazardous Substance (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b) (4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ), not listed.

SARA 311/312 Codes: not listed.

SARA Toxic Chemical (40 CFR 372.65): not listed.

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ): not listed.

All chemical ingredients are listed on the USEPA TSCA Inventory List.

#### **OSHA/MSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): 5 mg/M<sup>3</sup> TWA-8

MSHA: not listed.

OSHA Specifically Regulated Substance (29CFR 1910) not listed.

**State Regulations:** Consult state and local authorities for guidance.

**NFPA:** Health Hazard 3, Fire Hazard 0, Reactivity 1

**16. Other Information:**

**Date of preparation or last revision of this Safety Data Sheet:** 05/19/2015