U. S. LIME COMPANY Houston / Shreveport SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Hydrated Lime Slurry, Ca(OH)2	Other Means of Identification: Hydrated Lime Slurry, Slurried Calcium Hydroxide,
Company Identification :	
U. S. Lime Company 5420 Allison Road Houston, TX 77048	Information: (713) 987-5463 Houston
U.S. Lime Company – Shreveport 6000 St. Vincent Ave. Shreveport, LA 71106	Information: (318) 865-9566 Shreveport
Emergency Contacts:	(713) 987-5463 Houston
	(318) 865-9566 Shreveport

2. Hazards Identification 1305-62-8

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

Emergency Overview: Hydrated Lime Slurry is an odorless white or grayish-white material. It acts as a neutralizing agent in water and sewage treatment, a binder in mortars and soil stabilization.

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: May cause skin irritation, cause serious eye damage and may cause respiratory irritation.



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: High likelihood that if your skin has been exposed to lime slurry, you may receive a terminal burn as well as a chemical burn. 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.

Sore 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 n material spills.

Hazards not otherwise classified: Possibility of chemical and terminal burn if contact is made with product.

Ingredients with unknown toxicity: Not Applicable

<u>3. Composition/Information on Ingredients</u>

Component	CAS #	% by weight
Calcium Hydroxide	1305-78-8	>96%
Magnesium Oxide		<1%
Crystalline Silica		<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: Calcium Oxide.

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

Component	CAS #	Exposure Limits
Calcium	1305-62-0	OSHA PEL: 15 mg/m3 total
Hydroxide		5 mg/m3 respirable
		ACGIH TLV: 5 mg/m3

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)2	Appearance: White or grayish-white material.
Physical State: Liquid	Molecular Weight: 74.10
Odor: Odorless	Odor threshold: Not applicable
Meting Point: 580 C	pH: \leq 12.4 (Saturated Solution)
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

<u>11. Toxicological Information:</u>

Information on the likely routes of exposure: Inhalation and ingestion

Symptoms related to the physical, chemical and toxological 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

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 Li

OSHA/MSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): 5 mg/M³ 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 2, Fire Hazard 0, Reactivity 1

16. Other Information: Date of preparation or last revision of this Safety Data Sheet: <u>04/23/2015</u>