

U. S. LIME COMPANY
MATERIAL SAFETY DATA SHEET

MSDS Number: USL 1
Revision Date: December 16, 2010
Prepared pursuant to ANSI Standard
Z400.1-1998

1. Product and Company Identification

Product Name: Hydrated Lime Slurry

Synonyms: Slurried Calcium Hydroxide, Ca(OH)₂
Hydrate Slurry

Company Identification:

U.S. Lime Company - Houston
5420 Allison Road
Houston, TX 77048

Information: 713 987-5463 Houston
817 378-9048 Fort Worth
972 557-1670 Dallas
318 865-9566 Shreveport

U.S. Lime Company – Fort Worth
1750 Brennan Ave.
Fort Worth, TX 76106

U.S. Lime Company – Dallas
3000 South Beltline Road
Dallas, TX 75253

U.S. Lime Company – Shreveport
6000 St. Vincent Avenue
Shreveport, LA 71106

Emergency: 713 987-5463 Houston
817 378-9048 Fort Worth
972 557-1670 Dallas
318 865-9566 Shreveport

2. Composition/Information on Ingredients

Component	CAS #	Exposure Limits	% by weight
Calcium Hydroxide	1305-62-0	OSHA PEL Total Dust: 15 mg/m ³ ACGIH TLV: 2 mg/m ³	>90%
Calcium Oxide	1305-78-8		
Magnesium Oxide	1309-48-4	OSHA PEL: 10 mg/m ³ ACGIH TLV: 10 mg/m ³	<1.0%
Silicon Dioxide	7631-86-9	OSHA PEL Total Dust: 30 mg/m ³ For Respirable Silica, divide the percentage of Silica plus 2 ACGIH TLV: 0.1 mg/m ³	<1.0%

OSHA Regulatory Status: This material is subject to 29 CFR 1910.1200 (Hazard Communication).

3. Hazards Identification

Emergency Overview: Lime Slurry is an odorless, low viscosity suspension of calcium hydroxide in water. Contact can cause irritation to eyes, skin, and gastrointestinal tract. In mist form or if material becomes dry, it can irritate the respiratory system.

Potential Health Effects

Eyes: Contact can cause severe irritation or burning of eyes, with the potential of permanent damage.

Skin: Contact can cause irritation of skin.

Ingestion: This product can cause severe irritation of the gastrointestinal tract if swallowed.

Inhalation: This product can cause severe irritation of the respiratory system in mist or dry form. Long-term exposure may cause permanent damage. Lime slurry is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product may contain trace amounts of crystalline silica in the form of quartz or cristobalite, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled. Inhalation of silica can also cause a chronic lung disorder, silicosis.

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.

4. First Aid Measures

Eyes: Immediately flush eyes with generous amounts of water for at least 15 minutes. Pull back the eyelid to ensure that all lime substance has been washed out. Seek medical attention immediately. Do not rub eyes.

Skin: Wash exposed area with water. Apply burn ointment if burn occurs; seek medical attention if redness or irritation persists.

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

Inhalation: Move victim to fresh air. Seek medical attention if necessary. If breathing has stopped, give artificial respiration.

Note to Physicians: Provide general supportive measures and treat symptomatically.

5. Fire Fighting Measures

Fire Hazards: Lime slurry is not combustible or flammable. However, it reacts violently with acids, and may release heat sufficient to ignite combustible materials in certain instances. Hydrated lime slurry is not considered to be an explosion hazard, although reaction with incompatible materials may rupture containers.

Hazardous Combustion Products: None.

Extinguishing Media: Use dry chemical fire extinguisher. Do not use water or halogenated compounds. Large amounts of water may be used to deluge small quantities of hydrated lime slurry.

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

6. Accidental Release Measures

Spill /Leak Procedures: Do NOT use water on bulk material spills. Use proper protective equipment.

Small Spills: Use wet material containment methods to collect spilled materials. Do not clean up with compressed air. Store collected materials in sealed plastic or non-aluminum metal containers. Residue on surfaces may be water washed.

Large Spills: Use wet containment/collection techniques to collect spilled materials. If material has sufficiently dried to generate dust, evacuate area downwind of clean-up operations to minimize dust exposure. Store spilled materials sealed plastic or non-aluminum metal containers.

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

Handling: Keep in tightly closed containers. Protect containers from physical damage. Avoid direct skin contact with the material.

Storage: Store in a cool, dry, and well-ventilated location. Do not store near incompatible materials. Keep away from moisture. Do not store or ship in aluminum containers.

8. Exposure Controls/Personal Protection

Engineering Controls: Provide ventilation adequate to maintain PELs.

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

Skin Protection: Use appropriate gloves to prevent skin contact. Clothing should fully cover arms and legs.

Eye Protection: Use safety glasses with side shields or safety goggles.

Other: Eye wash fountain and emergency showers are recommended.

9. Physical and Chemical Properties

Appearance: White or grayish-white material.

Odor: Faint musty earth odor

Physical State: Solid **Boiling Point:** Decomposes @1076° F. to CaO

Vapor Pressure: N/A

Vapor Density: N/A

Specific Gravity: 1.2-1.5 g/cc

Solids Content: 38% - 42%

Solubility in Water: Material is a suspension of (CaOH)₂ **PH at 25 degrees C:** 12.45 (approximately)

10. Stability and Reactivity

Stability: Chemically stable unless in contact with acids. See also Incompatibility below.

Incompatibility/Conditions to Avoid: Hydrated lime should not be mixed or stored with the following materials.

ACIDS

REACTIVE FLUORIDATED COMPOUNDS

REACTIVE BROMINATED COMPOUNDS

REACTIVE POWERED METALS

ORGANIC ACID ANHYDRIDES

NITRO-ORGANIC COMPOUNDS

REACTIVE PHOSPHOROUS COMPOUNDS

INTERHALOGENATED COMPOUNDS

Hazardous Decomposition Products: None

Hazardous Polymerization: None

11. Toxicological Information:

No LD50/LC50 has been identified for this product's components. Hydrated lime is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product may contain trace amounts of crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled in the form of quartz or cristobalite.

12. Ecological Information:

Ecotoxicity: Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems in high concentrations.

Environmental Fate: This material shows no bioaccumulation effect or food chain concentration toxicity.

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:

Lime slurry is not classified as a hazardous material by DOT when transported by any means.

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): 15 mg/M³ Total Dust TWA-8

MSHA: not listed.

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

State Regulations: Consult state and local authorities for guidance.

16. Other Information:

HMIS: Health Risks 1, Flammability 0, Reactivity 0, Personal Protection, E

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

The above MSDS complies with MSHA'S Hazard Communication Standard 30 CFR, Part 47 and OSHA's Hazard Communication standard 29 CFR 1910.1200 and OSHA form 174. We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied.