

Limeco, Inc.

Material Safety Data Sheet

Product and Company Identification

Product name: Hydrated Lime Synonyms: Calcium Hydroxide, Ca(OH)₂

Company Identification:

Limeco, Inc.
8721 Industrial Dr.
Pearland, TX 77584
P.O. Box 2435
Pearland, TX 77588-2435
Phone: 281-482-4900
Fax: 281-482-4903
Emergency Phone Number:
Chemtrec: 800-424-9300

Composition/Information on Ingredients:

| <u>Component</u> | <u>CAS#</u> | <u>Exposure</u> |
|---------------------|-------------|--|
| <u>Limit</u> | | |
| Calcium Hydroxide | 1305-62-0 | OSHA PEL: 5mg/m ³ ACGIH TLF: 5 mg/m ³ |
| Magnesium Hydroxide | 1309-42-8 | OSHA PEL: N/A ACGIH TLV: N/A |
| Crystalline Silica | 14808-60-7 | OSHA PEL: 0.1 mg/m ³ ACGIH TLV 0.1 mg/m ³ |

Hazards Identification

Emergency Overview: Hydrated Lime is an odorless white or grayish-white powder. Contact can cause irritation to eyes, skin, respiratory system, and gastrointestinal tract. Hydrated Lime may contain small percentages of quicklime, reacts violently with water, releasing heat which may ignite combustible materials in certain instances.

Potential Health Effects

Eyes: Contact can cause severe irritation or burning of the eyes, including permanent damage. **Skin:** Contact can cause severe irritation or burning of skin, especially in the presence of moisture. **Indigestion:** This product can cause severe irritation or burning of the gastrointestinal tract if swallowed.

Inhalation: This product can cause irritation of the respiratory system. Long-term exposure may cause permanent damage. Hydrated lime is not listed by MSHA, OSHA, or IARC as 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 Issues: 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 dust has been washed out. Seek medical attention immediately. Do not rub eyes.

Skin: Wash Exposed area with large amounts of water. 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: Move victim to fresh air. Seek medical attention if necessary. If breathing has stopped, give artificial respiration.

5. Fire Fighting Measures

Fire Hazards: Hydrated Lime is not combustible or flammable. However, hydrated lime may contain percentages of quicklime which reacts violently with water, and may release heat sufficient to ignite combustible materials in certain instances. Quicklime is not considered to be an explosion hazard, although reaction with water or other incompatible materials may rupture containers.

Hazardous Combustion Products: None

Extinguishing Media: Use a dry chemical fire extinguisher. Large amounts of water may be used to deluge small quantities of hydrated lime.

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 Measure:

Spill/Leak Procedure: Do NOT use water on bulk material spills. Use proper protective equipment. **Small Spills:** Use dry methods to collect spilled materials. Avoid generation of dust. Do not clean up materials 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.

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

Cleanup: Residue amounts of material can be flushed with large amounts of water. Equipment can be washed with either a mild vinegar 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 concentrations exceed PEL.

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

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

Appearance: White or grayish-white powder

Odor: Odorless

Physical State: Solid

Boiling Point: 5162°F, 2850°C

Melting Point: 1076°F, 580°C

Vapor Pressure: N/A

Vapor Density: N/A

Specific Gravity: 2.2-2.4

Solubility in Water: Negligible 0.07-0.185

pH at 25 degrees C: 12.45

10. Stability and Reactivity

Stability: Chemically stable. See also Incompatibility below.

Incompatibility/Conditions to Avoid: Hydrated Lime should not be mixed with or stored with the following materials, due to potential for violent reaction and release of heat:

WATER (unless in a controlled process)

ACIDS

REACTIVE FLUORIDATED COMPOUNDS

REACTIVE BROMINATED COMPOUNDS

REACTIVE POWDERED METALS

ORGANIC ACID ANHYDRIDES

NITRO-ORGANIC COMPOUNDS

REACTIVE PHOSPHOROUS COMPOUNDS

INTERHALOGENATED COMPOUNDS

Hazardous Decomposition Products: None

Hazardous Polymerization: None

11. Lexicological 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:

Eco toxicity: Because of the high pH of this product, it would be expected to produce significant Eco toxicity 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:

Hydrated Lime is not classified as a hazardous material by DOT.

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-1A): 5 mg/m³ TWA-8

MSHA: not listed

OSHA Specifically Regulated Substance (29 CFR 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

WHMIS Classification: "E" Corrosive Materials

WHMIS Classification: "D2A" Materials causing other toxic effect