



MATERIAL SAFETY DATA SHEET

Hydrated Lime

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Hydrated Lime**
Synonyms: Lime Hydrate, Slaked Lime, Calcium Hydroxide
Chemical Family: Calcium Compounds

Company Identification: CALPORTLAND COMPANY
2025 E. Financial Way
Glendora, CA 91741
(626) 852-6200
www.calportland.com

Prepared By: Paul Eigbrett (MSDS Authoring Services)
Approved By: Jay Grady
Approval Date: August 8, 2009

2. COMPOSITION / INFORMATION ON INGREDIENTS

CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>	<u>OSHA PEL (ppm) Total Dust</u>	<u>OSHA PEL (ppm) Respirable Dust</u>	<u>ACGIH TLV (ppm) Total Dust</u>
Calcium Hydroxide	100%	1305-62-0	5 mg/m ³	5 mg/m ³	2 mg/m ³
Crystalline Silica	<2%	14808-60-7	2 mg/m ³	0.05 mg/m ³	0.05 mg/m ³

COMPOSITION COMMENT: --

All substances listed are associated with the nature of the raw materials used in the manufacture of this product and are not independent components of the product formulation.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! Exposure to high dust levels may irritate the skin, eyes, nose, throat or upper respiratory tract. Hydrated lime is strongly alkaline and can cause severe injury. Contact with the eyes or skin can cause irritation and possible irreversible tissue damage, corrosion damage, chemical burning and corneal damage.

Routes of Exposure:

Eye Contact: Dust can cause mechanical irritation of eyes. Hydrated lime is a strongly alkaline material and is very irritating to eyes.

MATERIAL SAFETY DATA SHEET

Hydrated Lime

Skin Contact: Chemical burns or irritation of skin may result due to hydrated lime content. Direct, prolonged or repeated contact with the skin may cause dermatitis.

Ingestion: May be corrosive to the digestive tract.

Inhalation: Exposure to dust generated during the handling or use of the product may irritate eyes, skin, nose, throat and upper respiratory tract. Prolonged or repeated exposure to airborne free crystalline silica can result in lung disease and/or lung cancer.

Medical Conditions which May be Aggravated by Inhalation or Dermal Exposure: Pre-existing eye, skin or upper respiratory and lung diseases may be aggravated by exposure to this product.

Carcinogenic Potential: This product is not listed as a carcinogen by NTP, OSHA, or IARC. It may, however, contain trace amounts of substances listed as carcinogens by these organizations including but not limited to: crystalline silica, hexavalent chromium, lead compounds, mercury compounds, nickel compounds, and possibly other chemicals which may result in exposures which require the following warning pursuant to California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

4. FIRST AID MEASURES

Eyes: In case of contact, do not rub or scratch your eyes. Due to lime content in this product, if eye contact occurs immediately flush eyes with copious amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.

Skin: Flush exposed skin with copious amounts of water for at least 15 minutes depending on concentration, amount and duration of exposure. Wash with mild soap and water. Immediately remove all contaminated clothing, including footwear. . Call physician if irritation persists.

Ingestion: Due to alkalinity caused by the lime content of this product, get medical attention immediately.

Inhalation of Airborne Dust: Remove to fresh air. Seek medical help if coughing and other symptoms do not subside.

5. FIRE FIGHTING MEASURES

Flash Point – Not Determined
Lower Explosive Limit – Not Determined
Upper Explosive Limit – Not Determined
Unusual Fire & Explosion Hazards – None Known

Extinguishing Media – Water
Special fire fighting Procedures – None
Hazardous Combustion Products – None

6. ACCIDENTAL RELEASE MEASURES

Containment: No special precautions. Wear appropriate personal protective equipment.

Method of Clean-up: Neutralize with dilute acid due to lime content. Scrape up material and place in an appropriate container.

MATERIAL SAFETY DATA SHEET

Hydrated Lime

7. HANDLING AND STORAGE

Handling: Avoid dust contact with eyes. Wear the appropriate eye protection against dust. Minimize dust generation and accumulation. Avoid breathing dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded. Use good safety and industrial hygiene practices.

Storage: Store in cool, dry, ventilated area away from sources of heat, moisture and incompatible materials. Moisture and long storage causes lumping and makes lime less reactive.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection: When engaged in activities where ingredients could contact the eye, wear safety glasses with side shields or goggles. In extremely dusty environments and unpredictable environments, wear unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when working with ingredients.

Skin Protection: Prevention is essential to avoiding potentially severe skin injury. Avoid contact products ingredients. Where prolonged exposure to products might occur, wear impervious clothing and gloves to eliminate skin contact.

Respiratory Protection: Avoid actions that cause dust exposure to occur. Use local or general ventilation to control exposures below applicable exposure limits. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and/or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.

Ventilation: Use local exhaust or general dilution ventilation to control exposure within applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance – White to gray powder

Odor – Earthy odor

Physical State – Solid/Powder

Specific Gravity (H₂O=1) – 2.4

pH (in water) (ASTM D 1293-95) – 12.8

Solubility in Water – Slight

Vapor Pressure – Not Applicable

Vapor Density – Not Applicable

Boiling Point – 2850C

Melting Point – 2500C

Evaporation Rate – Not Applicable

10. STABILITY AND REACTIVITY

Stability: Stable.

Conditions to avoid: Contact with incompatibles.

Hazardous Polymerization: Hazardous polymerization will not occur.

MATERIAL SAFETY DATA SHEET

Hydrated Lime

Incompatibility with other materials: Maleic anhydride and nitro-compounds

Hazardous Decomposition: When burned forms CaO, which is caustic and irritating to eyes, skin and respiratory system

11. TOXICOLOGICAL INFORMATION

Acute Effects: None known.

Chronic Effects / Carcinogenicity: Crystalline Silica: Exposures to respirable crystalline silica are not expected during the normal use of this product. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease and/or lung cancer. IACR states that crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

12. ECOLOGICAL INFORMATION

Ecotoxicity: This product has no known adverse effect on ecology. Hydrated lime is expected to be toxic to fish due to its high alkalinity. Discharge of large quantities directly into waterways would be expected to cause significant fish kills.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste material according to local, state and federal regulations. Never discharge directly into sewers or surface waters.

14. TRANSPORTATION INFORMATION

Hazardous Materials Description/Proper Shipping Name: Calcium Hydroxide -Not a hazardous material under U.S. Department of Transportation (DOT) regulations.

Hazard Class: Not Applicable

Identification Number: Not Applicable

Required Label Text: Not Applicable

Hazardous Substances/Reportable Quantities: Not Applicable

15. REGULATORY INFORMATION

FEDERAL REGULATORY STATUS:

Status under OSHA Hazard Communication Standard, 29 CFR 1910.1200: This product is considered a "hazardous chemical" (because of its health hazard) under this regulation, and should be included in the employer's hazard communication program.

Reportable Quantities Under the Clean Water Act, CERCLA, and EPCRA, 40 CFR 117, 302 and 355: Not listed.

MATERIAL SAFETY DATA SHEET

Hydrated Lime

Status Under the Toxic Substances Control Act, 40 CFR 710: All ingredients are listed.

Status under Workplace Hazardous Materials Information System (WHMIS), Canada: This product is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and is therefore subject to the labeling and MSDS requirements of the Workplace Hazardous Materials Information System (WHMIS).

16. OTHER INFORMATION

Label Requirements:

WARNING! EXPOSURE TO HIGH DUST LEVELS MAY IRRITATE THE SKIN, EYES, NOSE, THROAT OR UPPER RESPIRATORY TRACT. HYDRATED LIME IS STRONGLY ALKALINE AND CAN CAUSE SEVERE INJURY. CONTACT WITH THE EYES OR SKIN CAN CAUSE IRRITATION AND POSSIBLE IRREVERSIBLE TISSUE DAMAGE, CORROSION DAMAGE, CHEMICAL BURNING AND CORNEAL DAMAGE.

Hazardous Material Information System (HMIS):	Health	2
	Flammability	0
	Physical Hazard	1
	Personal Protection	B

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety glasses, gloves

ADDITIONAL INFORMATION:

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY CALPORTLAND, except that the product shall conform to contracted specifications. The information provided herein was believed by CalPortland Company to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

END OF MSDS