

Section 1 – Identification

Product Name: Calcium Hydroxide Hydrated Lime Chemical Name: Calcium Hydroxide Product Use: Restoration in Dentistry	Manufacturer: Keystone Industries 480 S Democrat Rd, Gibbstown, NJ 08027 Information Contacts: (856) 663-4700 Toll Free: (800) 333-3131 Emergency Phone Numbers: (800) 535-5053
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Section 2 – Hazards Identification

EMERGENCY OVERVIEW

This information is based on findings from related or similar materials.

- Hydrated lime is an odorless white or grayish-white granular powder. Contact can cause irritation to eyes, skin, respiratory system, and gastrointestinal tract. Contact may aggravate disorders of eyes, skin, gastrointestinal tract, and respiratory system.
- **H315 / H318 / H332 / H335 / H402**



Potential Health Effects, Signs and Symptoms of Exposure:

Primary Route of Entry	Inhalation, skin, and ingestion.
Eye	Causes severe eye irritation. Product reacts with moisture and protein of the eye to form clumps which are difficult to remove. Intense watering of the eyes, possible lesions, possible blindness when exposed for prolonged period. Causes corneal burns.
Skin	Causes skin irritation. Removes natural oils
Ingestion	Causes pain, vomiting blood, diarrhea, collapse, drop in blood pressure. Irritation to the gastrointestinal tract.
Inhalation	Dust may be irritating to the respiratory tract.

NOTE: Refer to Section 11, Toxicological Information for Details

Section 3 – Composition/Information on Ingredients

Chemical Identity	CAS Numbers	EINECS#	Exposure OSHA TWA/STEL	Limits ACGIH TWA/STEL	Carcinogen IARC/NTP/OSHA	%
Calcium Hydroxide	1305-62-0	215-137-3	TWA = 15 mg / m ³	TWA = 5 mg / m ³	Not Listed	>90.0
Quartz, Crystalline Silica	14808-60-7	238-878-4	TLV-TWA = 0.025 mg / m ³	TWA = 0.1 mg / m ³	Yes / Yes / N/A	<0.10

N/E – None Established	N/DA – No Data Available
N/R – Not Reviewed	N/A – Not Applicable

(items in parenthesis relate to 1999/45/EC)

Calcium Hydroxide: Danger Symbol – GHS05 (C), GHS07 (Xi) Hazard Statement: H315 (R38), H318 (R41), H335 (R37), H402 (N/A)
 Precautionary Statement: P261 (S23), P280 (S36/37/39), P305 + 351 + 338 (S26)

Quartz: Hydrated lime is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product may contain crystalline quartz silica, which has been classified by IARC as a group I carcinogen to humans when inhaled. Inhalation of silica can also cause chronic lung disorder, silicosis.

See Section 16 for Hazard and Precautionary Statement Key.

Section 4 – First Aid Measures

First Aid for Eye	In case of contact, or suspect contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
First Aid for Skin	Carefully and gently brush the contaminated body surfaces in order to remove all traces of lime. Use a brush, cloth or gloves. Remove all lime-contaminated clothing. Rinse contaminated area with lukewarm water for 15 to 20 minutes. Obtain medical attention immediately.

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First Aid for Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.
First Aid for Inhalation	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Section 5 – Fire Fighting Measures

Flash Point (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)
N/A	N/A	N/A

Method:

Extinguishing Media:	In case of fire use water spray, dry chemical, carbon dioxide or foam.
Fire Fighting Instructions:	Non-combustible
Unusual Hazards:	Substance is noncombustible.

Section 6 – Accidental Release Measures

Spill or Release Procedures	Shovel or vacuum up spilled product and place in closed container for disposal. Do not flush into sewer, stream, or other bodies of water or soil.
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Section 7 – Handling and Storage

Handling	Limit all unnecessary personal contact. Use appropriate PPE when handling. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers. Prevent leakage into the environment. For industrial use only.
Storage	Store in a cool, dry place.
Explosion Hazard	None.

Section 8 – Exposure Controls / Personal Protection

Engineering Controls	Mechanical ventilation should be used to control dust levels.
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Personal Protective Equipment

General	To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132), or European Standard EN166 be conducted before using this product.
Eye/ Face Protection	Use safety eyewear for protection against airborne particulate.
Skin Protection	Use impermeable clothing to prevent any contact with this product, such as gloves, apron, boots, or whole body suit. Recommended to prevent skin irritation in hypersensitive individuals. Natural rubber, neoprene, nitrile, or PVC gloves.
Respiratory Protection	In case of insufficient ventilation or extremely dusty environments, wear suitable respiratory equipment.

Section 9 – Physical and Chemical Properties

Appearance	Odor & Odor Threshold	pH	Specific Gravity	Viscosity	% Volatile
White Powder	None	N/A	N/A	N/A	N/A

Boiling Point/ Freezing Point	Decomposition Temperature	Octanol/Water Partitioning Coefficient Log Po/w	Vapor Pressure:	Vapor Density	Evaporation Rate	Ignition	Solubility In Water (20°C)
N/A	N/DA	N/DA	N/A	N/A	N/A	N/A	N/A

Section 10 – Stability and Reactivity

Stability: Stable	Incompatibility (Materials to Avoid): Strong Acids
Hazardous Decomposition Products: None	Hazardous Polymerization: Will not occur
Conditions to Avoid: Exposure to moisture or water. Dusty conditions.	

Section 11 – Toxicological Information

Acute Oral Toxicity N/DA	Acute Dermal Toxicity N/DA	Acute Inhalation Toxicity N/DA	Irritation – skin N/DA	Irritation – Eye N/ DA
Sensitization N/ DA		Mutagenicity N/DA	Sub-chronic Toxicity N/ DA	

Section 12 – Ecological Information

Ecotoxicological Information – very toxic to aquatic life.

Acute Toxicity to Fish N/DA	Acute Toxicity to Invertebrates N/ DA	Acute Toxicity to Algae N/ DA	Bioconcentration N/ DA	Toxicity to Sewage Bacteria N/ DA
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Chemical Fate Information

Biodegradability	N/DA. This material is not expected to bioaccumulate.
Chemical Oxygen Demand	N/ DA

Section 13 – Disposal Considerations

Dispose of in compliance with governmental regulation (state and federal).

Dispose of container and unused contents in accordance with federal, state and local requirements. For EU Member States, please refer to any relevant Community provisions relating to waste. In their absence, it is useful to remind the user that national or regional provisions may be in force.

Section 14 – Transport Information

Non-regulated, non-hazardous material: DOT, IATA, IMO (IMDG).

Section 15 – Regulatory Information
US Federal Regulations

Clean Air Act: HAP/ODS	This product contains the following HAP's or ODS: • NONE
Clean Water Act: Priority Pollutant	This product contains the following chemicals listed under the U. S. Clean Water Act Priority Pollutant and Hazardous Substance List: • None
FDA: Food Packaging Status	This product has not been cleared by the FDA for use in food packaging and / or other applications as an indirect food-packaging additive.
Occupational Safety and Health Act	This product is considered to be hazardous under the OSHA Hazard Communication Standard. It's hazards are: Calcium Hydroxide – CAS 1305-62-0 (Corrosive)
RCRA	This product contains the following chemicals considered to be hazardous waste under RCRA (40 CFR 261). • None
SARA Title III: Section 302 (RQ)	This product contains no chemicals regulated under Section 302 as extremely hazardous substances.

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SARA Title III: Section 302 (TPQ)	This product contains chemicals regulated under Section 304 as extremely hazardous chemicals for emergency release notification ("CERCLA" List): <ul style="list-style-type: none"> None
SARA Title III: Section 311-312:	This product is considered to be hazardous under the OSHA Hazard Communication Standard and is regulated under Section 311-312 (40 CFR 370). It's hazards are: <ul style="list-style-type: none"> Acute Health Hazard - Corrosive
SARA Title III: Section 313:	This product contains the following chemicals which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: None
TSCA Section 8(b): Inventory:	This product does contain chemicals listed on the TSCA inventory or otherwise complies with TSCA pre-manufacture notification requirements.
TSCA Significant New Use Rule:	None of the chemicals in this material have a SNUR under TSCA.





State Regulations

CA Right-to-Know Law:	None
California No Significant Risk Rule:	None
MA Right-to-Know Law:	Listed
NJ Right-to-Know Law:	Listed
PA Right-to-Know Law:	Listed
FL Right-to-Know Law:	None
MN Right-to-Know Law:	None

International Regulations

CDSL: Canadian Inventory (on Canadian Transitional List)	Listed. WHMIS = D2B (Irritant) and E (Corrosive)
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Labeling according to EC directives – 1272/2008 {CLP} and 1999/45/EC (items in parenthesis relate to 1999/45/EC)

<p>European Community:</p>    	<p>For Calcium Hydroxide (finished product):</p> <ul style="list-style-type: none"> DANGER SYMBOLS: GHS05 (C), GHS07 (Xi) HAZARD STATEMENT: H315 (R38), H318 (R41), H335 (R37), H402 (N/A) PRECAUTIONARY STATEMENT: P102 (S2), P261 (S23), P280 (S36/37/39), P305+351+338 (S26)
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Section 16 – Other Information

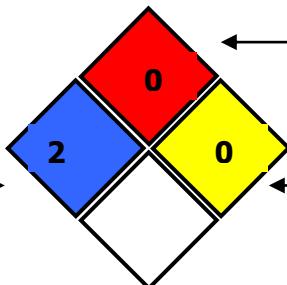
EU Classes and Risk / Safety Phrases for Referenced Ingredients (See Section 2):

<p>(items in parenthesis relate to 1999/45/EC)</p> <p>Danger Symbols: GHS05 (C) - Corrosive, GHS07 (Xi) - Irritant</p> <p>Hazard Statement: H315 (R38) – Causes skin irritation, H318 (R41) – Causes serious eye damage, H335 (R37) – May cause respiratory irritation, H402 (N/A) – Harmful to aquatic life.</p> <p>Precautionary Statement: P102 (S2), Keep out of reach of children. P261 (S23), Avoid breathing dust/fume/gas mist/vapor sprays. P280 (S36/37/39), Wear protective gloves/clothing/eye protection/face protection. P305 + 351 + 338 (S26), If in eyes, rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.</p>
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Hazard Rating System (Pictograms)

NFPA: <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; margin-right: 10px;"> Health → </div>  <div style="text-align: center; margin-left: 10px;"> ← Flammability ← Reactivity </div> </div>	HMIS:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 30px;">2</td> <td style="background-color: #0070C0; color: white; padding: 5px;">Health</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="background-color: #FF0000; color: white; padding: 5px;">Flammability</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="background-color: #FFFF00; padding: 5px;">Reactivity</td> </tr> <tr> <td colspan="2" style="height: 30px;"></td> </tr> </table>	2	Health	0	Flammability	0	Reactivity		
2	Health									
0	Flammability									
0	Reactivity									

MSDS Prepared by:	WME
Revision History:	02/29/2012
	05/01/13 Changed manufacturer from Deepak to Keystone, changed address and telephone number SWR

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