# 1. <u>Product and Company Identification</u>

(512) 388-7316 ext 235 Date Prepared: 5/20/15

Product Identifier: Hydrated Lime Synonyms: Calcium Hydroxide, Ca(OH)2 Company Identification: Austin White Lime Company P.O. Box 9556 Austin, TX 78766-9556 Emergency Phone Number: (512) 255-3646 Information Phone Number:

# 2. <u>Hazards Identification</u>

Hazard Classification: Eye Damage Category 1, Skin Irritation Category 2, Specific Target Organ Toxicity Single Exposure Category 3 (Respiratory System), Carcinogen Category 0.

## Label Elements:

### Signal word:

Danger

Hazard statements: Causes skin irritation. Causes serious eye damage. May cause cancer through inhalation. May cause respiratory irritation.

### Symbols:



### **Precautionary Statements:**

Wear protective gloves and eye protection. Wash exposed skin thoroughly after handling. Avoid breathing dust. Use only outdoors or in a well-ventilated area. 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 water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Seek medical attention if you feel unwell.

If exposed or concerned: Get medical advice.

Store in a cool, dry, and well-ventilated location.

Dispose of contents or containers in accordance with applicable regulations. Do not use water on material spills.

### Ingredients with unknown toxicity: Not applicable

#### 3. <u>Composition/Information on Ingredients</u> Chemical Name: Calcium Hydroxide

Common name and synonyms: Hydrated lime, Ca(OH)2

### CAS numbers and concentrations of ingredients:

<u>Component</u>	CAS#	% by weight
Calcium Hydroxide	1305-62-0	> 85%
Crystalline Silica	14808-60-7	<0.1%

# 4. First Aid Measures

# **Description of First Aid Measures:**

**Eyes:** Contact can cause severe irritation or burning of eyes, including permanent damage. 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:** Contact can cause severe irritation or burning of skin, especially in the presence of moisture. Wash exposed area with large amounts of water. Seek medical attention immediately.

**Ingestion:** Contact can cause severe irritation or burning of gastrointestinal tract if swallowed. 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.

Most important symptoms and effects, both acute and delayed: Irritation of skin, eyes, gastrointestinal tract or respiratory tract.

**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. <u>Fire Fighting Measures</u>

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

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

### Hazard Combustion Products: None.

Special Protective Equipment and 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:

### Personal precautions, protective equipment, and emergency procedures

**Spill/Leak Procedure:** Do NOT use water on bulk material spills. Lime reacts violently with water, releasing heat. Use proper protective equipment.

**Small Spills:** Use dry method 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.

### 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 solution, or detergent and water.

# 7. <u>Handling and Storage:</u>

### Precautions for Safe Handling

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

### Handling and Storage:

## Conditions for Safe Storage, including incompatibilities:

Store in a cool, dry, and well-ventilated location. Do not store near incompatible materials (see Section 10 below). Keep away from moisture. Long-term storage in aluminum containers is not recommended, as calcium oxide may corrode aluminum over longs periods of time.

# 8. <u>Exposure Controls/Personal Protection</u>

**Exposure Limits** 

Calcium Hydroxide	<u>CAS#</u> 1305-62-0	Exposure Limit OSHA PEL: 5 mg/m3 ACGIH TLV: 5 mg/m3
Crystalline Silica	14808-60-7	OSHA PEL: 0.1 mg/m3 ACGIH TLV: 0.1 mg/m3

**Engineering Controls:** Provide ventilation adequate to maintain PELs.

### **Individual Protection Measures**

Respiratory Protection: Use NIOSH/MSHA approved respirators if airborne concentrations exceed PEL.

**Skin Protection:** Use appropriate gloves to protect skin contact. When 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. <u>Physical and Chemical Properties</u>

Appearance: White or grayish-white powder Odor: Odorless Odor threshold: Not applicable pH at 25 degrees C: 12.45 Melting Point: 1076°F, 580°C Initial boiling point: 5162°F, 2850°C Flash Point: Not applicable Evaporation Rate: Not applicable Flammability: Not applicable Upper/Lower flammability or explosive limits: Not applicable Vapor Pressure: Not applicable Vapor Density: Not applicable Relative density: 2.2 - 2.4 Solubility in Water: Negligible 0.07-0.185 Partition co-efficient: n-octanol/water: Not applicable Auto-ignition temperature: Not available Decomposition temperature: Not available Viscosity: Not applicable

# 10. Stability and Reactivity

**Reactivity:** Hydrated Lime may contain small percentages of quicklime; quicklime reacts violently with water, releasing heat which may ignite combustible materials in certain instances.

Chemical stability: Chemically stable. See also Incompatibility below.

Possibility of hazardous reactions: See a. above.

Conditions to avoid: Do not allow hydrated lime to come into contact with incompatible materials.

## Stability and Reactivity

**Incompatibility:** 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 ALUMINUM POWDER ORGANIC ACID ANHYDRIDES NITRO-ORGANIC COMPOUNDS REACTIVE PHOSHOROUS COMPOUNDS INTERHALOGENTAED COMPOUNDS

Hazardous Decomposition Products: None

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

Information on the likely routes of exposure: See First Aid discussion above.

Symptoms related to the physical, chemical and toxological characteristics: See First Aid discussion above.

Delayed and immediate effects and also chronic effects from exposure: See First Aid discussion above.

Numerical measures of toxicity: No LD50/LC50 have been identified for this product's components.

**Carcinogen listing:** 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.

### 12. <u>Ecological Information [non-mandatory section]</u>:

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

### Persistence and degradability:

Bioaccumulative potential: This material shows no bioaccumulation effect or food chain concentration toxicity.

**Other adverse effects (such as hazardous to the ozone layer):** This material is alkaline and if released into water or moist soil will cause an increase in pH

### 13. <u>Disposal Considerations [non-mandatory section]</u>:

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. <u>Transportation Information [non-mandatory section]</u>:

UN number: Not regulated by the Department of Transportation
UN proper shipping name: Hydrated Lime
Transport hazard class: Hydrated Lime is not classified as a hazardous material by DOT.
Packing group:
Environmental hazard e.g. Marine pollutant (yes/no): This material is alkaline and if released into water or moist soil will cause an increase in pH.

# Transport in bulk according to Annex II of MARPOL 73/79 and the IBC Code

# 15. <u>Regulatory Information:</u>

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. 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

# 16. Other information

**Austin White Lime Company** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide. Individuals receiving this information must consult their own technical and legal advisors and/or exercise their own judgment in determining its appropriateness for a particular purpose. Austin White Lime will not be responsible or liable for claims, losses or damages resulting from the use of or reliance upon or failure to use this information.