



Austin White Lime Company
P.O. Box 9556, Austin, TX 78766
1-800-553-LIME
Safety Data Sheet

1. **Product and Company Identification**

Product Identifier: Quicklime

Other means of identification: Calcium Oxide, CaO

Company Identification:

Austin White Lime Company

P.O. Box 9556

Austin, TX 78766-9556

(512) 388-7316 ext 235

Date Prepared: 5/20/15

2. **Hazards Identification**

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

Label Elements:

Signal word:

Danger

Hazard statements: Causes skin irritation, causes serious eye damage. May cause cancer through inhalation. May cause respiratory irritation. Reacts violently with water, releasing heat which can ignite combustible materials.

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.

Hazards not otherwise classified:

Calcium Oxide reacts violently with water, releasing heat which may ignite combustible materials in certain instances.

Ingredients with unknown toxicity: Not applicable

3. **Composition/Information on Ingredients**

Chemical Name: Calcium Oxide

Common name and synonyms: Quicklime, CaO, Hi-cal lime



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Composition/Information on Ingredients

CAS numbers and concentrations of ingredients:

<u>Component</u>	<u>CAS#</u>	<u>% by weight</u>
Calcium Oxide	1305-78-8	>87%
Crystalline Silica	14808-60-7	<0.2%

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. Long-term exposure by inhalation may cause permanent damage. This product contains crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled. Inhalation of silica can also cause chronic lung disorder, silicosis.

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. Fire Fighting Measures

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

Fire Hazards: Quicklime is not combustible or flammable. However, quicklime reacts violently with water, and can release heat sufficient to ignite combustible materials. Quicklime 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.



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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 and water solution, or detergent and water.

7. Handling and Storage:

Precautions for Safe Handling

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

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 long periods of time.

8. Exposure Controls/Personal Protection

Exposure Limits

<u>Component</u>	<u>CAS#</u>	<u>Exposure Limit</u>
Calcium Oxide	1305-78-8	OSHA PEL: 5 mg/m ³ ACGIH TLV: 2 mg/m ³
Crystalline Silica	14808-60-7	OSHA PEL: 20mg/m ³ divided (by the percentage of silica in the dust plus 2) respirable ACGIH TLV: 0.1 mg/m ³

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. Physical and Chemical Properties

Appearance: White or grayish-white powder and/or pebble

Odor: Odorless

Odor threshold: Not applicable

pH at 25 degrees C: 12.45

Melting Point: 4658°F, 2570°C

Initial boiling point: 5162°F, 2850°C

Flash Point: Not applicable

Evaporation Rate: Not available

Flammability: Not applicable

Upper/Lower flammability or explosive limits: Not applicable

Vapor Pressure: Not applicable

Vapor Density: Not applicable

Relative density: 3.2 – 3.4

Solubility in Water: Negligible but reacts with water to produce calcium hydroxide and heat.

Partition co-efficient: n-octanol/water: Not available

Auto-ignition temperature: Not applicable

Decomposition temperature: Not applicable

Viscosity: Not available



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10. Stability and Reactivity

Reactivity: Quicklime reacts violently with water to form calcium hydroxide, releasing heat. See also Incompatibility below.

Chemical stability: Quicklime is chemically stable.

Possibility of hazardous reactions: See a. above.

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

Incompatibility: Quicklime 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 PHOSPHOROUS COMPOUNDS
INTERHALOGENATED COMPOUNDS

Hazardous Decomposition Products: None

11. Toxicological Information:

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

Symptoms related to the physical, chemical and toxicological 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: Quicklime 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. Ecological Information:

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.

Mobility in soil:

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. 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:

UN number: UN1910

UN proper shipping name: Calcium Oxide



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Transportation Information:

Transport hazard class: When transported by air only: Hazard Class 8-Corrosive.

Packing group: When transported by air only: Packing Group III

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

Special precautions which a user needs to be aware of, or needs to comply with in connection with transport or conveyance either within or outside their premises: When being transported by air, quicklime is classified in the Department of Transportation (DOT) regulations as a hazardous material. (49 CFR 172.101). For aircraft transport only, Calcium Oxide is classified as Hazard Class 8-Corrosive, UN1910, Packing Group III. For passenger aircraft, the maximum net quantity allowed per container is 25 kg. For cargo aircraft, the maximum net quantity allowed per container is 100 kg. For quantities greater than 25 kg up to and including 100 kg, the container shall be labeled with CARGO AIRCRAFT ONLY. Because express carriers (i.e. Federal Express, Airborne Express, and United Parcel Services) ship by air, quicklime presented to these carriers for shipment must be packaged, marked, and labeled in accordance with IATA requirements, and must be accompanied by the appropriate shipping documentation. Only personnel trained and certified under applicable DOT Hazardous Materials Regulations (contained in Title 49 of the Code of Federal Regulations) may prepare any quicklime product for air transport. Quicklime is not classified as a hazardous material by DOT when transported by means other than by air.

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.

HMIS: Health Risks 3, Flammability 0, Reactivity 1, Personal Protection E

NFPA: Health Hazard 3, Fire Hazard 0, Reactivity 1

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.