Material Safety Data Sheet

MSDS # 157.00

Section 1:

Product and Company Identification

Calcium Oxide

Calcium Oxide

Synonyms/General Names: Quick Lime

Product Use: For educational use only

Manufacturer: Columbus Chemical Industries, Inc., Columbus, WI 53925.

24 Hour Emergency Information Telephone Numbers

CHEMTREC (USA): 800-424-9300

ScholAR Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14586; (866) 260-0501; www.Scholarchemistry.com

Section 2:	Hazards Identification				
White crystalline solid or lumps; odorless.		HMIS (0 to) 4)		
	Health	2			
WARNING! Strongly corrosive to all body tissue. Reaction with water produces large amounts of heat.			0		
Target organs: None known	Reactivity	1			
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).					

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Calcium Oxide, (1305-78-8), >96%

Magnesium Oxide, (1309-48-4), 0-2.5%

First Aid Measures Section 4:

Always seek professional medical attention after first aid measures are provided.

Eves: Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally. Skin: Immediately flush skin with excess water for 15 minutes while removing contaminated clothing. **Ingestion:** Call Poison Control immediately. Do not induce vomiting. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration.

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Section 5:
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Fire Fighting Measures

Noncombustible solid. When heated to decomposition, emits acrid fumes.

Protective equipment and precautions for firefighters: Use foam or dry chemical to extinguish fire. Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

Section 6:

Accidental Release Measures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all ignition sources and ventilate area. Contain spill with sand or absorbent material and place material in a sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

Section 7:

Handling and Storage

Handling: Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.

Storage: Store in Corrosive Area [White Storage] with other corrosive items. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

Exposure Controls / Personal Protection

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Use NIOSH-approved respirator with a dust cartridge. Exposure guidelines Calcium Oxide: OSHA PEL: 5 mg/m³; ACGIH TLV: 2 mg/m³; STEL: N/A.

White



CANUTEC (Canada): 613-424-6666



Calcium Oxide

Section 9: Physical and Chemical Properties

		-	
Molecular formula Molecular weight	CaO. 56.08.	Appearance Odor	White crystalline solid. No odor.
6			NO OUOL.
Specific Gravity	3.3 g/mL @ 20°C.	Odor Threshold	N/A.
Vapor Density (air=1)	N/A.	Solubility	Reactive with water to produce heat.
Melting Point	2850°C.	Evaporation rate	N/A (Butyl acetate = 1).
Boiling Point/Range	N/A.	Partition Coefficient	N/A $(log P_{OW})$.
Vapor Pressure (20°C)	N/A.	рН	Basic.
Flash Point:	N/A.	LEL	N/A.
Autoignition Temp.:	N/A.	UEL	N/A.
			N/A = Not available or applicable

Section 10:

Stability and Reactivity

Avoid heat and and water – reacts with water to produce large amounts of heat.

Stability: Stable under normal conditions of use and storage.

Incompatibility: Organic materials, acids, moisture.

Shelf life: Fair, moisture sensitive.

Section 11:

Toxicology Information

Acute Symptoms/Signs of exposure: *Eyes*: Redness, tearing, itching, burning, damage to cornea, conjunctivitis, loss of vision. *Skin*: Redness, blistering, burning, itching, tissue destruction with slow healing. *Ingestion*: Nausea, vomiting, burning, diarrhea, ulceration, convulsions, shock. *Inhalation*: Coughing, wheezing, shortness of breath, headache, spasm, inflammation and edema of bronchi, pneumonitis.

Chronic Effects: Repeated/prolonged skin contact may cause thickening, blackening or cracking. Repeated eye exposure may cause corneal erosion or loss of vision.

Sensitization: none expected

Calcium Oxide: LD50 [oral, rat]; N/A; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A

Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

Section 12:

Ecological Information

Ecotoxicity (aquatic and terrestrial): Ecological impact has not been determined.

Section 13:

Disposal Considerations

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

Section 14:	Transport Information			
DOT Shipping Name: DOT Hazard Class: Identification Number:	Not regulated by DOT.	Canada TDG: Hazard Class: UN Number:	Not regulated by TDG.	
Section 15: Regulatory Information				

Regulatory Information

EINECS: Listed (215-138-9). **TSCA:** All components are listed or are exempt. WHMIS Canada: E: Corrosive Material. California Proposition 65: Not listed .

The product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 16:

Other Information

Current Issue Date: January 23, 2009

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