

Comet Chemical Company Ltd.

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Materials Safety Data - CALCIUM HYDROXIDE

(Slaked Lime, Hydrated Lime, Lime Milk, *often just called "Lime"*)

Shipping Name	UN - not regulated
Transport of Dangerous Goods Class	not regulated for transport
WHMIS Class	not regulated for transport
Material Use	E
	mortar, whitewash, leather prep., neutralising agent

1. HAZARDOUS INGREDIENTS	CAS NUMBER	%	TWAEV (mg/m ³)	LD ₅₀ ORAL	(mg/kg) SKIN	LC ₅₀ ppm INHALATION
Calcium Hydroxide	1305-62-0	100%	5	7300	not known	not known

2. PHYSICAL CHARACTERISTICS

Odour & Appearance	soft white powder with bitter alkaline taste (impure material may be buff or grey)
Odour Threshold	odourless
Vapour Pressure	not volatile
Vapour Density (air = 1)	not volatile
Melting Point	decomposes losing water at 580°C to form CaO; which melts at 2500°C
Density	2.25
Water Solubility	1.85g/litre (0°C); 0.7g/litre (100°C)
pH (water solution)	soluble in glycerol, solutions of ammonia salts, and acids saturated solution - 12.5-12.7 (strongly alkaline)

3. FLAMMABILITY & REACTIVITY

Flash Point	not flammable
Flammable Limits	none - not flammable
Hazardous Combustion Products	decomposes in fire to form corrosive CaO (quicklime or lime)
Firefighting Precautions	as for combustibles sustaining fire; firefighters must wear SCBA
Sensitivity to Static Discharge	not sensitive
Sensitivity to Mechanical Impact	not sensitive
Chemical Stability	stable; will not polymerize
Reactive With	strong acids, maleic anhydride, phosphorous, nitroparaffins
Dangerous Decomposition Products	none apart from "Hazardous Combustion Products"

4. TOXICOLOGY EFFECTS OF ACUTE EXPOSURE

Skin Contact	irritating
Skin Absorption	nil
Eye Contact	severely irritating; may damage eyes
Inhalation	irritating; causes sneezing and coughing
Ingestion	irritating to mouth and throat; harmless to stomach

(Calcium Hydroxide, cont'd)

EFFECTS OF CHRONIC EXPOSURE

General	prolonged exposure may cause skin cracking and dermatitis
Sensitising	no
Carcinogenic	no effects documented in humans
Reproductive Effect	experimental mutagen; no effects documented in humans
Synergistic With	not known
Estimated LD ₅₀	7300 mg/kg (oral, mouse or rat)
Estimated LC ₅₀	not known

5. PROTECTIVE EQUIPMENT

Hands	leather rubber or tightly woven cloth gloves
Eyes	safety glasses with side shields or chemical goggles
Respirator	respirator with dust filter is recommended unless good ventilation exists (see TWAEV, (1) above)
Clothing	boots, long trousers and long sleeves are recommended

6. ENVIRONMENT

Leak Precaution	none
Handling Spill	prevent material from reaching streams or ponds; sweep or shovel material and store in closed containers for disposal; residue may be neutralised with weak dilute acid and flushed to sewer
Waste Disposal	do not flush bulk of spill to sewer ; may be neutralised with dilute mineral acids to form harmless salts which can be landfilled

7. STORAGE & HANDLING

Keep in tightly sealed container - material gradually neutralises with atmospheric CO₂. If use generates dust, use with good ventilation or a good quality dust filtering respirator. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath and safety shower must be available near the workplace.

8. FIRST AID

SKIN:	Wash with soap and plenty of water. Remove contaminated clothing and do not reuse until thoroughly cleaned or laundered.
EYES:	Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there is any irritation.
INHALATION:	Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION:	Give plenty of fruit juice (preferably) or water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, keep victim's head below the hips to prevent inhalation of vomited material. Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The risk and danger of this is greater than the risk of poisoning through absorption of this product. The stomach should be emptied under medical supervision, after the installation of an airway to protect the lungs.

Emergency telephone numbers - weekdays from 8:00 - 5:00 (705) 436-5580
at all other times (800) 567-7455 (Philip Environmental)

Prepared for Comet Chemical Co. Ltd., by Nicholas Morgan, November 2002; Revised August 2005

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PLEASE ENSURE THAT THIS MSDS IS GIVEN TO AND EXPLAINED TO THE PERSON USING THIS PRODUCT.