

# MSDS – Material Safety Data sheet Pure Cal High Calcium Hydrated Lime (Calcium Hydroxide)

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I. Product and Compan	y Information	Reviewed on 08/07/09

800-433-0036 Information:

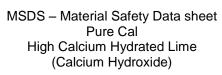
Manufacturer: Western Lime Corporation 206 N. 6<sup>th</sup> Avenue West Bend, WI 53095

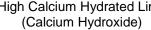
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Chemical Name	Chemical Family	Chemical Formula
Calcium Hydroxide	Alkaline earth hydroxide	Mostly Ca(OH) <sub>2</sub>
Molecular weight	Trade Names/Synonyms	Material Use
CaO = 74.10	Pure Cal, Hydrated Lime, Hydrate,	Water Treatment, Flux, Caustic
	Calcium Hydroxide	agent, pH adjustment, absorption

II. Composition and Inf	ormation on Ingr	redients	
Component	CAS#	Exposure Limits	% by weight
Calcium Hydroxide	1305-62-0	OSHA PEL: 5mg/m3 ACGH TLV: 5mg/m3	>90%
Magnesium Oxide	1309-48-4	OSHA PEL: 10 mg/m3 ACGIH TLV: 10 mg/m3	< 2.0%
Calcium Oxide	1305-78-8	OSHA PEL: 5 mg/m3 ACGH TLV: 2mg/m3	<1.0%
Crystalline Silica	14808-60-7	OSHA PEL: <u>10 mg/m3</u> (% SiO2 resp +2) ACGIH TLV: 0.025 mg/m3	N/A

III. Hazards	Identification	
	Overview: Hydrated lime is an odorless white or greyish-white granular powder. Contact	
	ritation to eyes, skin, respiratory system, and gastrointestinal tract. Quicklime reacts water, releasing sufficient heat to ignite combustible materials.	
Eyes:	Contact can cause severe irritation or burning of eyes, including permanent damage.	
Skin:	Contact can cause severe irritation or burning of skin, especially in the presence of moisture.	
Ingestion:	This product can cause severe irritation or burning of gastro-intestinal tract if swallowed	
This product can cause severe irritation of the respiratory system. Long-term exposure may cause permanent damage. Hydrated Lime is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product may contain crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled in the form of quartz or crystobalite. Inhalation of silica can cause a chronic lung disorder, silicosis.		
Medical Conditions Aggravated by Exposure: Contact may aggravate disorders of eyes, skin,		
gastrointestinal tract, and respiratory system.		
Potential Environmental Effects: This material is alkaline and if released into water or soil will cause and		
increase in its pH.		

IV. First Aid	Measures	
Eyes:	Immediately flush eyes with large amounts of water for at least 15 minutes. Pull back the eyelid to make sure all the lime dust has been washed out.	
Skin:	Flush exposed area with large amounts of water. Seek medical attention immediately.	
Inhalation:	Remove to fresh air. Seek medical attention if necessary. If breathing has stopped, give artificial respiration.	
Ingestion: Give large quantities of water or fruit juice. Do not induct vomiting. Seek medical attention immediately. Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing.		
Note to Physicians: Provide general supportive measures and treat symptomatically.		





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V. Fire Fighting Measures		
Fire Hazards:	Hydrated Lime is not combonot an explosion hazard.	ustible or flammable. Hydrated Lime is
Hazardous Combustion Products:	None Identified.	
Extinguishing Media:	Use dry chemical fire exting	guisher or water
Fire Fighting Instructions:		om and upwind of fire. Wear full fire- unker gear), and respiratory protection

VI. Accidental Release M	easures	
Spill/Leak Procedures:	Use proper protective equipment. Hydrated Lime is a fine powder which can easily be entrained into the air.	
Small Spills:	Wash area with water. Neutra	llize with dilute vinegar solution.
Large Spills:	Use dry methods to collect spilled materials. Evacuate area down wind of clean-up operations to avoid dust exposure. Store spilled materials in dry, sealed plastic or metal containers.	
Containment:	For large spills, as much as possible avoid the generation of dusts. Do not release into sewers or waterways.	
Cleanup:		ned with large amounts of water. nated by washing with either a mild detergent and water solution.

VII. Handlin	g and Storage
Handling:	Keep in tightly closed containers. Protect from physical damage. Avoid direct contact with material.
Storage:	Store in a cool, dry and well ventilated location. Do not store near incompatible materials. Keep away from moisture. Do not store or ship in aluminum containers.

VIII. Exposure controls/Pe	ersonal Protection Equipment	
Personal Protective Equipment (PPE)	Wear clean, dry gloves, full length pants over boots, long sleeved shirt buttoned at the neck, head protection and approved eye protection selected for the working conditions.	
Gloves	Gauntlets cuff style	
Respiratory	NIOSH approved filtering anti-dust mask	
Eyes	Tight fitting goggles/glasses with side shield	
Footwear	Resistant to caustics	
Clothing	Fully covering skin	

IX. Physical and o	chemical properties			
Physical State:	Appearance:	Odo	r:	Specific Gravity:
Solid	White powder substance	No C	Odor	2.2 – 2.4 g/cc
Boiling Point:	Vapor Pressure:	pH (	25° C):	Density (kg/m3):
5162 F, 2850 C	N/A	Sat	Soln CaO: 12.45	400 - 700
Melting Point:	Vapor Density:	Solu	bility in Water:	Freezing Point:
4658 F, 2570 C	N/A	0.12	5/100 g Sat.soln	2580 C



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X. Stability and R	eactivity
Stability:	Chemically stable, but reacts slowly with carbon dioxide to form calcium carbonate.
Incompatibility/C onditions to avoid:	Hydrated Lime should not be mixed or stored with the following materials, due to the potential for violent reaction and release of heat.  Acids, Reactive Fluorinated Compounds, Reactive Brominated Compounds, Reactive Powdered Metals, Organic Acid Anhydrides, Nitro-Organic Compounds, Reactive Phosphorous Compounds.
Hazardous Decomposition Products:	Hydrated lime wil decompose at 540 C to form calcium Oxide and water
Hazardous Polymerization:	None

## XI. Toxicological Information

No LD50/LC50 have been identified for this products components. Hydrated Lime is not listed by MSHA, OSHA, or IARC as a carcinogen, but this product may contain crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled in the form of quartz or crystobalite.

XII. Ecological Informa	tion	
Ecotoxicity:		oduct, it would be expected to produce sure to aquatic organisms and aquatic
Environmental Fate:	This material shows no bioaccum	ulation or food chain toxicity potential.

#### XIII. Disposal Considerations:

Dispose of in accordance with all applicable federal, state, and local environmental regulations. If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation Act

XIV. Transportation Information	
Hydrated Lime is not classified as a hazardous material by	DOT when transported



WHIMS

Classification

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XV. Regulatory Infor	mation			
	EPA Regulations			
RCRA Hazardous Waste Number (40 CFR 261.33)			Not Listed	
RCRA Hazardous Waste Classification (40 CFR 261)			Not Listed	
CERCLA Hazardous Substance (40 CFR 261)			Not Listed	
CERLA Reportable Quantity (RQ)  Not Liste		Not Listed		
SARA 311/312 codes Not List		Not Listed		
Sara Toxic Chemical (40 CFR 372.65) Not Listed		Not Listed		
SARA EHS (Extremely Hazardous Substance) (40 CFR 355)		55)	Not Listed	
Threshold Planning Quantity (TPQ)			Not Listed	
All components are listed on the USEPA TSCA Inventory List				
	OSHA/MSHA Regulation	<u>ons</u>		
Air Contaminant (29 CFR 1910.1000, Table Z-1)			Not Listed	
MSHA Not Listed		Not Listed		
OSHA Specifically Regulated Substance (29CFR 1910)		Not Listed		
State	Regulations: Consult state and local	authorities for g	uidance	
	Canadian Environmental Protection	on Act (CEPA)		
Domestic Substances List Listed		Listed		
XVI. Other Information	on			
HMIS	Health Risks		1	
	Flammability		0	
	Reactivity		0	
	Personal Protection	E		
NFPA	Health Hazard		1	
	Fire Hazard		0	
	Reactivity		0	
WHIMS Classification	"E" Corrosive Materials			

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"D2A" Materials Causing Other toxic effects