GREER LIME COMPANY - MATERIAL SAFETY DATA SHEET
OSHA Hazard Communication

PRODUCT IDENTIFICATION	CAS REGISTRY NO.	DATE REVISED
Hydrated Lime; Hydrate; Calcium Hydroxide, $Ca(OH)_2$	**CAS No. 1305-62-0**	**7/1/2010** **Previous versions obsolete.**

Section I – Contact Information

MANUFACTURER	24 Hr Emergency Contact No.	HMIS III SAFETY RATING
Greer Lime Company HC 78 Box 93A Riverton, West Virginia 26814	In WV: (800) 344-5133 Outside WV: (800) 538-3100 **Telephone No. for Information:** (304) 296-1751	Health - 2 Flammability - 0 Physical Hazard - 1 Protective Equip - E

Section II – Health Hazard Information

Routes of Entry	Inhalation? YES	Absorption Through Skin? YES	Ingestion (Swallowing)? YES
Health Hazards	Acute	Corrosive to skin and eyes. Causes irritation and inflammation to mucus membranes and respiratory passages.	
	Chronic	Long-term exposure can cause irritation, ulceration, and perforation of nasal septum.	
Carcinogenicity Calcium Hydroxide	NTP? NO	IARC Monographs? NO	OSHA Regulated? NO
Signs and Symptoms of Exposure		Irritation of skin, eyes, and respiratory tract.	
Medical Conditions Generally Aggravated by Exposure		Respiratory Disease, Skin Conditions	

Section III – Composition / Information on Ingredients

INGREDIENTS (Specific Chemical Identity; Common Names)	CAS REGISTRY NO.	OSHA PEL[1]	ACGIH TLV[2]	% By Weight (Approx)
Calcium Hydroxide ($Ca(OH)_2$)	1305-62-0	(T) 15 mg/m^3 (R) 5 mg/m^3	(T) 5 mg/m^3	>94
Calcium Oxide (CaO)	1305-78-8	(T) 5 mg/m^3	(T) 2 mg/m^3	<1
Magnesium Oxide (MgO)	1309-48-4	(T) 15 mg/m^3 (R) 5 mg/m^3	(F) 10 mg/m^3	<2
Silicon Dioxide (SiO_2), Amorphous	7631-86-9	(T) [80 mg/m^3 / (%SiO_2)]	(I) 10 mg/m^3 (R) 3 mg/m^3	<1
Silica (Si), Crystalline Quartz	14808-60-7	(T) [30 mg/m^3 / (SiO_2 + 2)] (R) [10 mg/m^3 / (SiO_2 + 2)]	(R) 0.05 mg/m^3	<1
Aluminum Oxide (Al_2O_3)	1344-28-1	(T) 15 mg/m^3 (R) 5 mg/m^3	(T) 10 mg/m^3	<0.3
Iron Oxide (Fe_2O_3)	1309-37-1	(T) 10 mg/m^3	(T) 5 mg/m^3	<0.1

(T): Total; (R): Respirable; (I): Inhalable

(1) OSHA PEL: Occupational Safety and Health Administration, Permissible Exposure Limit is the time weighted average exposure for an 8-hr work shift of a 40-hr workweek.
(2) ACGIH TLV: American Conference of Governmental Industrial Hygienists, Threshold Limit Value is the time weighted average recommended concentration for an 8-hr work shift of a 40-hr workweek.

Section IV – First Aid Measures

Inhalation	Move to fresh air. Seek medical attention if necessary. If breathing has stopped, give artificial respiration.
Ingestion	Do NOT induce vomiting. Drink large quantities of water. Seek medical attention immediately.
Skin Contact	Remove excess material from skin and flush the affected area with plenty of water. Remove contaminated clothing and wash before reuse. Seek medical attention immediately.
Eye Contact	Immediately flush eyes with large amounts of water for at least 15 minutes. Pull back the eyelid to make certain all lime dust has been washed out. Seek medical attention immediately.

Section V – Fire and Explosion Hazard Information

Flammable Limits	Hydrated Lime is not combustible or flammable.
Flash Point	N/A
Extinguishing Method	Use dry chemical fire extinguisher or water.
Special Fire Fighting Procedures	N/A
Unusual Fire and Explosion Hazards	Hydrated Lime is not an explosion hazard.

Section VI – Accidental Release Measures

Initial Actions to Be Taken	Ventilate the area around the accidental release and remove all unnecessary personnel.
Cleaning Methods	Use dry methods to collect large spills. Evacuate area down wind of clean-up operations to avoid dust exposure. Residual amounts can be flushed with large amounts of water or neutralized with a dilute vinegar solution.

Section VII – Precautions for Safe Handling / Storage

Waste Disposal Method	Dispose of product in accordance with Federal, State, and Local regulations.
Precautions to be Taken during Handling/Storage	Keep in tightly closed containers in a cool, dry, and well-ventilated location. Keep away from moisture. Store away from incompatible chemicals and acids.

Section VIII – Control Measures / Personal Protection

Respiratory Protection	NIOSH approved dust filter mask as minimal protection	
Ventilation	Local Exhaust	To maintain TLV and PEL
	Mechanical	To maintain TLV and PEL
	Special	None
	Other	None
Protective Gloves	Gauntlets cuff style	
Eye Protection	Shielded glasses or fitted goggles to reduce the chance of eye injury	
Other Protective Clothing	Clothing fully covering skin.	
Work / Hygienic Practices	Maintain dust exposure limits below TLV and PEL. If not possible, use respiratory protection. Avoid contact with eyes and skin. Wash thoroughly after handling. Wash clothing after contact.	

Section IX – Physical / Chemical Characteristics

Boiling Point (Calcium Oxide)	5,162 °F
Vapor Pressure (mm Hg)	0.0 mm Hg
Vapor Density (Air = 1)	N/A
Solubility in Water	Slight, 0.2% @ 32 °F
Appearance and Color	White, odorless powder
Specific Gravity (H_2O = 1)	2.3
Melting Point	4,662 °F
Evaporation Rate	N/A

Section X – Stability / Reactivity Information

Stability	Chemically stable, but reacts slowly with carbon dioxide to form calcium carbonate.
Incompatibility – Conditions 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, and other potentially reactive materials.
Hazardous Decomposition Products	Hydrated Lime will decompose at 1,076 °F to form calcium oxide and water.
Hazardous Polymerization	None

Section XI – Toxicological Information

Hydrated Lime is not found to be toxic. It is not listed by MSHA, OSHA, or IARC as a carcinogen. This product may contain Crystalline Silica which has been classified as carcinogenic to humans when inhaled in the form of Quartz, Crystobalite, and/or Tridymite.

Section XII – Ecological Information

Environmental Fate	This material shows no bioaccumulation potential.
Environmental Toxicity	Because of the high pH of this material, it would be expected to produce potential toxicity upon exposure to aquatic organisms and aquatic systems.

Section XIII – Disposal Considerations

Dispose of unused material in accordance with the Federal, State, and Local disposal requirements.

Section XIV – Transport Information

Hydrated Lime is not classified as a hazardous material by the Department of Transportation (DOT).

Section XV – Regulatory Compliance

EPA, RCRA Hazardous Waste Classification (40CFR261)	Not Listed
EPA, RCRA Hazardous Waste Number (40CFR261.33)	Not Listed
EPA, CERCLA Hazardous Substance (40CFR261)	Not Listed
EPA, CERCLA Reportable Quantity (RQ)	Not Listed
EPA, SARA 311/312 Codes	Not Listed
EPA, SARA Toxic Chemical (40CFR372.65)	Not Listed
EPA, SARA EHS (Extremely Hazardous Substance (40CFR355)	Not Listed
EPA Threshold Planning Quantity (TPQ)	Not Listed
EPA, TSCA Inventory List	All Components Listed
OSHA, Air Contaminant (29CFR1910.1000, Table Z-1)	Not Listed
OSHA, Specifically Regulated Substance (29CFR1910)	Not Listed
MSHA	Not Listed
State Regulations – Consult state and local authorities for guidance	See Note
Canadian Environmental Protection Act, Domestic Substances List	Listed

Section XVI – Other Information

Disclaimer

The technical data presented herein is given as information only and is assumed to be reliable. Greer Lime Company assumes no responsibility for any inaccuracies or for any damage or injury that may occur during the use of this information.