GREER LIME COMPANY SAFETY DATA SHEET (SDS)

Section I – Product and Company Identification

Product Identification	Manufacturer	24 -Hour Emergency Contact No.	Recommended Use
Burnt Lime; Pebble	Greer Lime Company		Water and sewage
Lime; Quicklime;	1088 Germany Valley	In WV: (800) 344-5133	treatment,
Calcium Oxide, CaO	Limestone Road	Outside WV: (800) 538-3100	manufacturing, acid
	Riverton, WV 26814		neutralization,
CAS No. 1305-78-8		— • • • • • • •	industrial
		l elephone No. for	applications,
		Information	construction, etc.
		(304) 567-2141	

Section II – Hazards Identification

Health Hazards	Skin Irritation (Category 2) Serious Eye Damage (Category 1) Respiratory Sensitization (Category 1B) Specific Target Organ Toxicity Single Exposure: Respiratory System (Category 3)
Pictograms	
Signal Word	Danger
Hazard Statements	Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary Statements	 Keep out of reach of children. Avoid breathing dust. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Wear protective gloves and eye protection. Wash exposed skin thoroughly after handling. Store product in a dry place. Do not handle until all safety precautions have been read and understood. Dispose of contents or containers in accordance with applicable regulations. IF ON SKIN: Wash exposed skin with plenty of water. 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 at rest and comfortable. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If exposed and concerned; or if experiencing respiratory symptoms: Get medical advice.

Other Hazards not covered by GHS	None
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Section III – Composition / Information on Ingredients

INGREDIENTS (Specific Chemical Identity; Common Names)	CAS REGISTRY NO.	% By Weight (Approx)
Calcium Oxide (CaO)	1305-78-8	>94
Magnesium Oxide (MgO)	1309-48-4	<3
Silicon Dioxide (SiO ₂), Amorphous	7631-86-9	<1.5
Silica (Si), Crystalline Quartz	14808-60-7	<0.1
Aluminum Oxide (Al ₂ O ₃)	1344-28-1	<0.5
Iron Oxide (Fe ₂ O ₃)	1309-37-1	<0.2

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 – Firefighting Measures

Extinguishing Method	Use dry chemical fire extinguisher. Dot not use water except in those cases that water may be used to deluge small amounts of Calcium Oxide.
Special Firefighting Equipment and Precautions	Reaction with water may produce enough heat to ignite combustible materials. Respirators may be necessary to prevent inhalation of fumes or vapors.
Specific Hazards in Case of Fire	Material may be an explosion hazard when wet and confined.

Section VI – Accidental Release Measures

Initial Actions to Be Taken	Ventilate the area around the accidental release and remove all	
	unnecessary personnel.	
	Use dry methods to collect large spills. Care should be taken to avoid	
Cleaning Methods	causing dust to become airborne. Vacuum cleaning systems	
	recommended. Do not use water on material spills.	

Section VII – Handling and 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 – Exposure Controls / Personal Protection

Respiratory Protection	NIOSH approved dust filter mask as minimal protection		
Ventiletion	Local Exhaust	To maintain TLV and PEL	
	Mechanical	To maintain TLV and PEL	
ventilation	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.		
Maintain dust exposure limits below TLV and PEL. If not possi		elow TLV and PEL. If not possible, use	
Work / Hygienic Practices	respiratory protection. Avoid contact with eyes and skin. Wash		
	thoroughly after handling. Wash clothing after contact.		

INGREDIENTS	OSHA PEL ⁽¹⁾	ACGIH TLV ⁽²⁾
Calcium Oxide (CaO)	(T) 5 mg/m ³	(T) 2 mg/m ³
Magnesium Oxide (MgO)	(T) 15 mg/m ³ (R) 5 mg/m ³	(F) 10 mg/m ³
Silicon Dioxide (SiO ₂), Amorphous	(T) [80 mg/m ³ / (%SiO ₂)]	(I) 10 mg/m ³ (R) 3 mg/m ³
Silica (Si), Crystalline Quartz	(T) [30 mg/m ³ / (SiO ₂ + 2)] (R) [10 mg/m ³ / (SiO ₂ + 2)]	(R) 0.05 mg/m ³
Aluminum Oxide (Al ₂ O ₃)	(T) 15 mg/m ³ (R) 5 mg/m ³	(T) 10 mg/m ³
Iron Oxide (Fe ₂ O ₃)	(T) 10 mg/m ³	(T) 5 mg/m ³

(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 IX – Physical and Chemical Properties

Appearance	White/gray lumps, granules, or powder
Odor and Threshold	None
рН	12.45 @ 25°C (in water at maximum solubility)
Melting Point	4,658 °F
Initial Boiling Point	5,162 °F
Flash Point	N/A
Evaporation Rate	N/A
Flammability	Product not flammable
Explosive Limits	No data available
Vapor Pressure	0.0 mm Hg
Vapor Density	N/A

Relative Density	3.3
Solubility	Reacts with water to form calcium hydroxide while generating heat.
Partition Coefficient: n- octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available

Section X – Stability and Reactivity

Stability	Chemically stable, but reacts rapidly with water to form calcium hydroxide, generating heat
Incompatibility – Conditions to Avoid	Burnt Lime should not be mixed or stored with the following materials due to the potential for violent reactions and release of heat: water (except when controlled), 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	None
Hazardous Polymerization	None

Section XI – Toxicological Information

Acute Effects	Skin Contact: May cause irritation. Corrosive with contact Eye Contact: may cause irritation. Corrosive with contact Inhalation: May cause lung irritation and inflammation to mucus membranes and respiratory passages
Chronic Effects	May cause irritation, ulceration, and perforation of nasal septum. Burnt 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. Long-term exposure to crystalline silica may result in silicosis, lung cancer, or other respiratory diseases
Acute Toxicity	IDLH – Humans 25 mg/m ³ (Crystobalite and Tridymite), 50 mg/m ³ (Quartz and Tripoli)

Section XII – Ecological Information

V		
Ecotoxicity	Due to the high pH of the product, upon exposure to aquatic organisms and aquatic systems, it may produce significant ecotoxicity in high concentrations.	
Persistence and Degradability	No data available	
Bioaccumulative Potential	This material shows no bioaccumulation potential.	
Mobility in Soil	No data available	
Other Adverse Effects	Due to the material's alkalinity, if released into water or moist soil will cause an increase in pH	

Section XIII – Disposal Considerations

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

Section XIV – Transport Information

UN Number	UN1910
UN Proper Shipping Name	Calcium Oxide
Trongport Hozard Class	When transported by air: Hazard Class 8-
Transport Hazaru Class	Corrosive
Packing Group	When transported by air: Packing Ground III
Environmental Hazards/Marine Pollutant	Due to the material's alkalinity, if released into
	water or moist soil will cause an increase in pH
	Burnt Lime is not classified as a hazardous
	material by the Department of Transportation
Special Processions Which User Needs to be	(DOT) when transported by ground. However,
Awaro	when transported by air, this material is classified
Aware	by DOT as a hazardous material. Disposal of
	product may be subject to state, federal, or local
	laws and regulations.

Section XV – Regulatory Information

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

HMIS III Safety Rating	Health – 3; Flammability – 0; Physical Hazard – 2; Protective Equipment - E
Revision Information	This SDS was revised on 5/14/15. All previous versions are obsolete
WARNING	This product contains chemicals known to the State of California to cause
	cancer and birth defects or other reproductive harm.
CANADA - WHMIS	Classification D2A (Toxic) and Class E (Corrosive)
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.