

# GREER LIME COMPANY - MATERIAL SAFETY DATA SHEET

## OSHA Hazard Communication

<u>PRODUCT IDENTIFICATION</u>	<u>CAS REGISTRY NO.</u>	<u>DATE REVISED</u>
Lime Kiln Dust; Kiln Dust; Baghouse Dust	<b>CAS No. N/A</b>	7/1/2010  Previous versions obsolete.

### Section I – Contact Information

<u>MANUFACTURER</u>	<u>24 Hr Emergency Contact No.</u>	<u>HMIS III SAFETY RATING</u>
Greer Lime Company HC 78 Box 93A Riverton, West Virginia 26814	In WV: (800) 344-5133 Outside WV: (800) 538-3100  <u>Telephone No. for Information:</u>  (304) 296-1751	Health - 3 Flammability - 0 Physical Hazard - 2 Protective Equip - E

### Section II – Health Hazard Information

<u>Routes of Entry</u>	<u>Inhalation?</u> YES	<u>Absorption Through Skin?</u> YES	<u>Ingestion (Swallowing)?</u> YES
<b>Health Hazards</b>	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.	
<b>Carcinogenicity</b> Lime Kiln Dust	<u>NTP?</u> NO	<u>IARC Monographs?</u> NO	<u>OSHA Regulated?</u> NO
<b>Signs and Symptoms of Exposure</b>		Irritation of skin, eyes, and respiratory tract.	
<b>Medical Conditions Generally Aggravated by Exposure</b>		Respiratory Disease, Skin Conditions	

### Section III – Composition / Information on Ingredients

<u>INGREDIENTS</u> (Specific Chemical Identity; Common Names)	<u>CAS</u> <u>REGISTRY</u> <u>NO.</u>	<u>OSHA PEL</u> <sup>(1)</sup>	<u>ACGIH TLV</u> <sup>(2)</sup>	<u>% By Weight</u> (Approx)
Calcium Carbonate (CaCO <sub>3</sub> )	471-34-1	(T) 15 mg/m <sup>3</sup>	(T) 10 mg/m <sup>3</sup>	<80
Calcium Oxide (CaO)	1305-78-8	(T) 5 mg/m <sup>3</sup>	(T) 2 mg/m <sup>3</sup>	<50
Magnesium Oxide (MgO)	1309-48-4	(T) 15 mg/m <sup>3</sup> (R) 5 mg/m <sup>3</sup>	(F) 10 mg/m <sup>3</sup>	<3
Silicon Dioxide (SiO <sub>2</sub> ), Amorphous	7631-86-9	(T) [80 mg/m <sup>3</sup> / (%SiO <sub>2</sub> )]	(I) 10 mg/m <sup>3</sup> (R) 3 mg/m <sup>3</sup>	<5
Silica (Si), Crystalline Quartz	14808-60-7	(T) [30 mg/m <sup>3</sup> / (SiO <sub>2</sub> + 2)] (R) [10 mg/m <sup>3</sup> / (SiO <sub>2</sub> + 2)]	(R) 0.05 mg/m <sup>3</sup>	<2
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	1344-28-1	(T) 15 mg/m <sup>3</sup> (R) 5 mg/m <sup>3</sup>	(T) 10 mg/m <sup>3</sup>	<3
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1309-37-1	(T) 10 mg/m <sup>3</sup>	(T) 5 mg/m <sup>3</sup>	<2

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

(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

<b>Inhalation</b>	Move to fresh air. Seek medical attention if necessary. If breathing has stopped, give artificial respiration.
<b>Ingestion</b>	Do NOT induce vomiting. Drink large quantities of water. Seek medical attention immediately.
<b>Skin Contact</b>	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.
<b>Eye Contact</b>	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

<b>Flammable Limits</b>	Lime Kiln Dust is not combustible or flammable. However, it reacts with water, releasing sufficient heat to ignite combustible materials in certain cases.
<b>Flash Point</b>	N/A
<b>Extinguishing Method</b>	Use dry chemical fire extinguisher. Do not use water except in those cases that water may be used to deluge small amounts of Lime Kiln Dust.
<b>Special Fire Fighting Procedures</b>	Reaction with water may produce enough heat to ignite combustible materials.
<b>Unusual Fire and Explosion Hazards</b>	Material may be an explosion hazard when wet and confined.

#### Section VI – Accidental Release Measures

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

#### Section VII – Precautions for Safe Handling / Storage

<b>Waste Disposal Method</b>	Dispose of product in accordance with Federal, State, and Local regulations.
<b>Precautions to be Taken during Handling/Storage</b>	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

<b>Respiratory Protection</b>	NIOSH approved dust filter mask as minimal protection	
<b>Ventilation</b>	Local Exhaust	To maintain TLV and PEL
	Mechanical	To maintain TLV and PEL
	Special	None
	Other	None
<b>Protective Gloves</b>	Gauntlets cuff style	
<b>Eye Protection</b>	Shielded glasses or fitted goggles to reduce the chance of eye injury	
<b>Other Protective Clothing</b>	Clothing fully covering skin.	
<b>Work / Hygienic Practices</b>	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

<b>Boiling Point (Calcium Oxide)</b>	5,162 °F
<b>Vapor Pressure (mm Hg)</b>	0.0 mm Hg
<b>Vapor Density (Air = 1)</b>	N/A
<b>Solubility in Water</b>	Reacts with water to form calcium hydroxide while generating heat
<b>Appearance and Color</b>	White to gray to light brown, odorless powder
<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	3.0 – 3.5
<b>Melting Point</b>	4,662 °F
<b>Evaporation Rate</b>	N/A

## Section X – Stability / Reactivity Information

<b>Stability</b>	Chemically stable, but reacts rapidly with water to form calcium hydroxide, generating heat.
<b>Incompatibility – Conditions to Avoid</b>	Lime Kiln Dust should not be mixed or stored with the following materials due to the potential for violent reaction 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.
<b>Hazardous Decomposition Products</b>	None
<b>Hazardous Polymerization</b>	None

## Section XI – Toxicological Information

Lime Kiln Dust 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

<b>Environmental Fate</b>	This material shows no bioaccumulation potential.
<b>Environmental Toxicity</b>	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

Lime Kiln Dust is not classified as a hazardous material by the Department of Transportation (DOT) when transported by ground. However, when transported by air, this material is classified by DOT as a hazardous material because it contains calcium oxide.

### 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.