



## Safety Data Sheet LIME

### SECTION 1 – IDENTIFICATION

**PRODUCT NAME:** LIME  
**EFFECTIVE DATE:** May 15, 2015  
**CHEMICAL FAMILY/  
FORMULA:** Drilling Fluid Additive  
Calcium Hydroxide  
**MANUFACTURER:** SUN DRILLING PRODUCTS CORP.  
503 Main Street  
Belle Chasse, LA 70037

**CHEMICAL EMERGENCY – Spill, Leak, Fire, Accident**  
USA/Canada Call 1-800 424-9300 CHEMTREC

### SECTION 2 – HAZARD IDENTIFICATION

**CLASSIFICATION:** Physical Health Hazard  
Category 1, Causes serious eye damage  
Category 2, Causes skin irritation  
Category 4, Harmful if inhaled

#### LABELLING:

**Symbol** – Xi - Irritant  
**Signal Word** – Danger



#### Pictograms:

#### Hazard Statements

**H315:** Causes skin irritation.  
**H318:** Causes serious eye damage.  
**H335:** May cause respiratory irritation.

#### Precautionary Statements

P280: Wear protective gloves, protective clothing, and eye protection.  
P262: Do not get in eyes, on skin, or on clothing.  
P362 + P364: Remove contaminated clothing and wash before reuse.  
P302 + P352: If on skin, wash with plenty of soap and water.  
P332 + P313: If skin irritation persists, seek medical advice/attention.  
P305 +P351+P338+ P310: If in eyes, rise cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek emergency medical advice.

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P261: Avoid breathing dust.

P271: Use only outdoors or in well-ventilated area.

P284: In case of inadequate ventilation, wear respiratory protection.

P304 + 340 + 312: If inhaled, remove person to fresh air and keep comfortable for breathing. If symptoms persist, seek emergency medical advice.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

| HAZARDOUS INGREDIENT | PERCENT | CAS NUMBER | PEL   |
|----------------------|---------|------------|---|
| Calcium Hydroxide    | 92-98   | 1305-62-0  | 15 mg/m <sup>3</sup> Total Dust<br>5 mg/m <sup>3</sup> Respirable Dust  |
| Magnesium Oxide      | <1.0    | 1309-48-4  | 15 mg/m <sup>3</sup> Total Dust<br>5 mg/m <sup>3</sup> Respirable Dust  |
| Silicon Dioxide      | <1.0    | 7631-86-9  | 30 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Crystalline, Quartz) Total Dust<br>10 mg/m <sup>3</sup> %SiO <sub>2</sub> +2 (Crystalline, Quartz, Respirable) |

The criteria for listing components in the composition are as follows: Carcinogens are listed when present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or greater. Non-hazardous components may be listed at 3.0% or greater if not proprietary in nature. This is not intended to be complete compositional disclosure. Refer to section 14 for applicable states right-to-know and other regulatory information.

### EMERGENCY OVERVIEW

#### APPEARANCE/ODOR:

White to Grayish-White Powder/Faint Musty Odor

#### SHORT TERM EXPOSURE

**GENERAL:** Contact can cause moderate to severe irritation to the eyes, skin, respiratory system, and gastrointestinal tract.

**EYES:** Moderately to severely irritating, potentially resulting in corrosive eye burns on direct contact.

**SKIN:** Can cause irritation and defatting of skin with prolonged direct contact. Calcium hydroxide can slowly penetrate the skin, causing damage from rash to ulceration and corrosion based on the extent of exposure.

**INHALATION:** Mild overexposure may cause cough and bronchospasm. Severe overexposure through inhalation may cause upper airway edema and burns, noisy breathing due to obstruction in airways, and possible lung injury.

**INGESTION:** Ingestion may result in burns to the lips, tongue, lining of the mouth, and upper airway. Seek immediate medical attention if ingested.

**OSHA REGULATED:** Refer to Section 1 for OSHA permissible exposure limits for ingredients of this product.

**LISTED CARCINOGEN:** NTP RoC- Not listed. IARC MONOGRAPHS – Not classified\*.

\*This product is not listed by OSHA, NTP, or IARC as a carcinogen, but it may contain trace amounts of crystalline silica, which is classified by IARC as (Group 1) carcinogenic to humans when inhaled in the form of quartz or cristobalite.



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### SECTION 4 – FIRST AID MEASURES

**EYE CONTACT** - In case of eye contact, flush immediately with water for a minimum of 15 minutes; pull eyelid back to ensure complete flushing of lime from eye. Do not rub eye. Seek medical attention.

**SKIN CONTACT** – If contact with skin results in irritation, wash thoroughly with soap and large amounts of water. Seek medical attention if irritation, reddening or burning sensation occurs and persists.

**INHALATION** - If affected by inhalation, remove to fresh air. Seek medical attention if respiratory irritation persists.

**INGESTION** - If swallowed, do not induce vomiting; seek immediate medical attention.

### SECTION 5 – FIRE FIGHTING MEASURES

**FLASHPOINT:** NA

**EXTINGUISHING MEDIA:** Use dry chemical to extinguish fire. Do not use halogenated compounds (containing Halon product). Extinguishing with water will use large volumes of water – also, material is alkaline and will increase in pH if mixed with water.

**DECOMPOSITION PRODUCTS:** Fire may generate toxic vapors of Chlorine or Hydrogen Chloride gas, Sodium oxides.

**LOWER FLAME LIMIT:** NA

**HIGHER FLAME LIMIT:** NA

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Product is not considered an explosion hazard.

**FIRE FIGHTING EQUIPMENT:** Fire Fighters and others exposed to products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

**CHEMICAL EMERGENCY NUMBER (24 HOURS):** CHEMTREC 1-800-424-9300 USA/CANADA

**SPILL:** In case of spill, if product cannot be collected by sweeping or vacuum and reused, dispose of in accordance with applicable regulations. Product as sold is a nonhazardous solid industrial waste. Avoid spillage into drains, surface, and ground water. Product is an alkaline substance that increases pH to a maximum of 12.4 in a saturated water solution at 25°C.

**RCRA STATUS:** Not regulated.

### SECTION 7 – HANDLING AND STORAGE

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and prompt removal of material from eyes, skin and clothing. Good housekeeping is essential in reducing possible slipping hazards. Product is not known to be a combustible dust hazard.

**HANDLING AND STORAGE:** Protect from moisture and humidity during storage. Provide sufficient general ventilation during and after application. Close container after each use to prevent contamination. Avoid prolonged or repeated contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking or smoking. If necessary, take first aid action shown in Section 4.



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### SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

#### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting protective equipment.

**EYE PROTECTION:** Use close-fitting safety glasses, goggles, or safety glasses with face shield to prevent particles from contacting eye.

**RESPIRATORY PROTECTION:** Use NIOSH N95 or similar approved protection for particulates if exposure is unknown or exceeds any permissible limits.

**PROTECTIVE GLOVES:** Wear impervious gloves; natural rubber, nitrile rubber, and neoprene rubber are recommended.

**PROTECTIVE CLOTHING:** Chemical-resistant clothing, close-fitting at wrists and ankles, should be worn to prevent skin contact.

**VENTILATION:** Process enclosure, General or Local exhaust to prevent exposures from exceeding permissible limits.

**LOCAL EXHAUST:** Recommended in closed places.

Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded (see below). Consult the respirator manufacturer to determine appropriate type of equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

**VENTILATION NOTES:** Enclose process or provide general or local ventilation to control exposure levels below airborne exposure limits (see below). The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment. Consult NFPA Standard 91 for design of exhaust systems.

**ACGIH THRESHOLD LIMIT VALUE:** 5 mg/m<sup>3</sup> Respirable Dust

**PROTECTIVE EQUIPMENT:** HMIS PERSONAL PROTECTION INDEX: H – goggles, gloves, apron, respirator

The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|                                 |  |
|---------------------------------|--|
| <b>APPEARANCE/ODOR:</b>         | White crystals/Odorless                |
| <b>BOILING POINT:</b>           | Decomposes at 1076°F, to Calcium Oxide |
| <b>FREEZING POINT:</b>          | N/A                                    |
| <b>FLASHPOINT:</b>              | N/A                                    |
| <b>VAPOR PRESSURE:</b>          | N/A                                    |
| <b>VAPOR DENSITY (AIR = 1):</b> | N/A                                    |
| <b>SPECIFIC GRAVITY</b>         | 2.2 - 2.4                              |
| <b>pH:</b>                      | ~12.45 @ 25°C                          |
| <b>SOLUBILITY IN WATER:</b>     | Negligible                             |



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### SECTION 10 – STABILITY AND REACTIVITY

|                                  |  |
|----------------------------------|--|
| <b>STABILITY:</b>                | Stable under normal ambient and anticipated storage and handling conditions, unless in contact with incompatible materials listed below.   |
| <b>HAZARDOUS POLYMERIZATION:</b> | Will Not Occur.  |
| <b>CONDITIONS TO AVOID:</b>      | Contact with the following: Strong acids, such as Hydrochloric, Sulfuric, and Nitric, Reactive Fluoridated Compounds, Reactive Brominated Compounds, Reactive Powdered Metals such as Lithium, Organic Acid Anhydrides, Nitro-Organic Compounds, Reactive Phosphorus Compounds, or Interhalogenated Compounds such as Bromine Trifluoride. |
| <b>INCOMPATIBILITY:</b>          | Compounds listed above.  |

### SECTION 11 – TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:** This product is not acutely toxic via the oral, dermal, or inhalation route.

**SKIN CORROSION/IRRITATION:** Contact can severely irritate and burn the skin.

**IRRITATION/SERIOUS EYE DAMAGE/:** Direct eye contact with product can cause irritation and possible serious eye damage.

**GERM CELL MUTAGENICITY:** ND

**CARCINOGENICITY:** ND

**REPRODUCTIVE TOXICITY:** ND

**STOT-SINGLE EXPOSURE:** There is no evidence associating single exposure to the substance with a consistent and identifiable toxic effect.

**STOT- REPEATED EXPOSURE:** There is no evidence associating repeated exposure to the substance with a consistent and identifiable toxic effect.

**ASPIRATION HAZARD:** N/A

### SECTION 12 – ECOLOGICAL INFORMATION

Data from laboratory studies and from scientific literature is noted below if available.

### SECTION 13 – DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** Follow applicable governing regulations for disposal. Product as sold is nonhazardous per RCRA.



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**SECTION 14 – TRANSPORTATION INFORMATION**

The data provided in this section is for information only. The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations to properly classify your shipment for transportation.

**PROPER SHIPPING NAME:** DOT NON-REGULATED – **LIME**  
**REPORTABLE QUANTITY:** None  
**HAZARD CLASS AND LABEL:** None  
**UN/NA NUMBER:** N/A  
**HARMONIZED CODE/TARIFF CODE** 2825.90.40  
**PACKAGING SIZE:** 50# Bags

**SECTION 15 – REGULATORY INFORMATION**

**SARA 311 CATEGORIES:**

**EPA ACUTE:** Yes (Eyes – solid irritant)  
**EPA CHRONIC:** No  
**EPA IGNITABILITY:** No  
**EPA REACTIVITY:** No  
**EPA SUDDEN RELEASE OF PRESSURE:** No  
**CERCLA RQ VALUE:** None  
**SARA TPQ:** None  
**SARA RQ:** None  
**EPA HAZARD WASTE#:** None  
**CLEAN AIR:** N/A  
**CLEAN WATER:** N/A  
**SARA SECTION 313:** No  
**NFPA HEALTH:** 1  
**NFPA FLAMMABILITY:** 0  
**NFPA REACTIVITY:** 0  
**DEA Chemical Trafficking Act:** N/A  
**TSCA STATUS:** All ingredients in this product are on the TSCA Inventory List.

**SECTION 16 – OTHER INFORMATION**

**FOOT NOTES:** N/A NOT APPLICABLE      **ND** – NO DATA AVAILABLE  
> = GREATER THAN      < = LESS THAN

**REVISION STATEMENT:** Changes have been made throughout this Safety Data Sheet. Please read the entire document.



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