



## Safety Data Sheet

In accordance with CFR 1910.1200 (OSHA HCS)

SDS No. 430

Review Date: February 7, 2018

### 1 Identification of substance and company

**Product name:** Calcium hydroxide  
**Product code:** 11243, 90520  
**Relevant use and restrictions on use:** Research and product development  
**Manufacturer/Supplier:** Noah Technologies Corporation  
1 Noah Park  
San Antonio, Texas 78249-3419  
Phone: 210-691-2000  
Fax: 210-691-2600  
Web site: www.noahtech.com  
**Emergency information:** CHEMTREC  
800-424-9300

### 2 Hazards identification

#### Emergency Overview:



**Pictogram(s):** Corrosion  
Exclamation mark

**Signal word(s):** Danger

**Hazard statements:** H315 - Causes skin irritation.  
H318 - Causes serious eye damage  
H335 - May cause respiratory irritation  
H402 - Harmful to aquatic life

**Precautionary statements:** P264 - Wash skin thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P273 - Avoid release to the environment.  
P280 - Wear eye protection / face protection / protective gloves  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332 + P313 - If skin irritation occurs: Get medical advice / attention.  
P337 + P 313 - If eye irritation persists: Get medical advice / attention.  
P362 + P364 - Take off contaminated clothing and wash before reuse.

**Hazards not otherwise classified:** None

**GHS Classification:** Skin irritation - 2  
Serious eye damage - 1  
Specific target organ toxicity - single exposure - 3, respiratory system  
Acute aquatic toxicity - 1

**HMIS ratings (scale 0-4):** Health hazard: 2  
Flammability: 0  
Physical hazard: 0

### 3 Composition/Information on ingredients

**Chemical name:** Calcium hydroxide  
**CAS number:** 1305-62-0  
**EC number:** 215-137-3  
**Formula:** Ca(OH)<sub>2</sub>  
**Synonyms:** Caustic lime, hydrated, lime, slaked lime, Biocalc  
**Ingredients of known acute toxicity:** Calcium hydroxide

### 4 First aid measures

**After inhalation:** Move to fresh air. If not breathing, give artificial respiration. Consult a physician.

**After skin contact:** Wash off with soap and plenty of water. Consult a physician.

**After eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**After ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Information for doctor:** Show this safety data sheet to the doctor in attendance

**Symptoms/effects; acute and delayed:** Shortness of breath, coughing, burning sensation, wheezing, headache, nausea and vomiting.

**Immediate medical attention and special treatment needed:** Burns of the mucous membranes, upper respiratory tract, eyes and skin

#### 5 Fire-fighting measures

**Suitable and unsuitable extinguishing agents:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use extinguishing media most appropriate for surrounding fire conditions.

**Special hazards caused by the material, its products of combustion or resulting gases:** Caustic fumes of calcium oxide

**Special fire fighting procedures:** Wear self-contained breathing apparatus. Always wear fully protective fire fighting equipment / clothing.

**Unusual fire and explosion hazard:** No data available

#### 6 Accidental release measures

**Person-related safety precautions:** Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe area.

**Measures for environmental protection:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into environment must be avoided.

**Measures for cleaning/collecting:** Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Additional information:** See Section 7 for information on safe handling  
See Section 8 for information on personal protective equipment  
See Section 13 for information on disposal  
See Section 15 for regulatory information

#### 7 Handling and storage

**Information for safe handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Ensure adequate ventilation.

**Information about protection against explosions and fires:** No data available

**Storage requirements to be met by storerooms and containers:** Keep container tightly closed. Store in dry, well ventilated area.

**Incompatibility (avoid contact with):** Readily absorbs carbon dioxide from air to form calcium carbonate  
Store away from strong acids  
Maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane, phosphorus, some metals

**Further information about storage conditions:** Empty container may contain hazardous residues.  
Store in dry place.  
Corrosive

#### 8 Exposure controls/personal protection

**Ventilation requirements:** Local exhaust. General mechanical ventilation.

**Components with exposure limits that require monitoring:** ACGIH TLV: TWA 5 mg/m<sup>3</sup>

**General protective and hygienic measures:** The usual precautionary measures for handling chemicals should be adhered to  
Keep away from foodstuffs, beverages and food  
Instantly remove any soiled and impregnated garments  
Wash hands during breaks and at the end of the work  
Avoid contact with the eyes and skin

**Personal protective equipment:**

**Respiratory protection:** Filter-dust, fume, mist  
(Use only NIOSH or CEN approved Equipment)

**Hand protection:** Handle with gloves. Natural rubber / Neoprene / Impervious  
Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with product.

**Eye protection:** Safety glasses, goggles

**Skin protection:** Protective work clothing sufficient to prevent contact.

**Additional protective equipment:** Emergency eyewash and safety shower.

**Precautionary labeling:** Wash thoroughly after handling  
Do not get in eyes, on skin or on clothing.  
Do not breathe dust, vapor, mist gas  
Danger - Corrosive

#### 9 Physical and chemical properties

**Physical state:** Powder

**Color:** White to off-white

**Odor:** Odorless

**Odor threshold:** No data available

**Molecular Weight (Calculated):** 74.09

**pH** 12 - 13 @ 20 C

**Melting point/freezing point/range:** - H<sub>2</sub>O @ 580 C

**Boiling point/range:** Decomposes

**Sublimation temperature/start:** No data available

**Decomposition temperature:** No data available

**Flammability (solid, gas):** Non-flammable

**Flash point:** No data available

**Autoignition temperature:** No data available

**Danger of explosion:** No data available

<b>Flammable limits:</b>	
<b>Lower:</b>	No data available
<b>Upper:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor pressure (mm Hg):</b>	No data available
<b>Vapor density:</b>	No data available
<b>Specific gravity:</b>	2.343
<b>Bulk density:</b>	No data available
<b>Solubility in/Miscibility with water:</b>	1.85 g/L @ 0 C
<b>Partition coefficient n-octanol/water:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Other information:</b>	No data available

#### 10 Stability and reactivity

<b>Reactivity:</b>	No data available
<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	No data available
<b>Conditions to be avoided:</b>	Air, moisture See section 7 for information on proper handling and storage
<b>Materials to be avoided:</b>	Store away from strong acids Maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane, phosphorus, some metals
<b>Dangerous reactions:</b>	No data available
<b>Hazardous decomposition products: (thermal and other)</b>	Oxides of calcium

#### 11 Toxicological information

<b>LD/LC50 values that are relevant for classification:</b>	oral-rat LD <sub>50</sub> : 7340 mg/kg
<b>Irritation or corrosion of skin:</b>	No data available
<b>Irritation or corrosion of eyes:</b>	Eye-rabbit 10 mg:SEV
<b>Primary irritant or corrosive effect: on the skin:</b>	No data available
<b>on the eye:</b>	No data available
<b>Sensitization:</b>	No data available
<b>Potential health effects:</b>	
<b>Inhalation:</b>	Inhalation may be fatal as a result of spasm, pulmonary edema, swelling and edema of the larynx and bronchi
<b>Ingestion:</b>	May cause gastrointestinal disturbances.
<b>Skin:</b>	No data available
<b>Eyes:</b>	No data available
<b>Signs and symptoms of exposure:</b>	Harmful if inhaled, ingested or absorbed through the skin. Extremely destructive to the tissues of the mucous membranes, upper respiratory tract, eyes and skin. Inhalation may be fatal as a result of spasm, pulmonary edema, swelling and edema of the larynx and bronchi. Symptoms of exposure may include shortness of breath, coughing, burning sensation, wheezing, headache, nausea and vomiting.
<b>Carcinogenicity:</b>	IARC: No component of this product is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product is identified as a carcinogen or potential carcinogen by OSHA.
<b>Additional information:</b>	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

#### 12 Ecotoxicological information

<b>Toxicity:</b>	
<b>Toxicity to fish:</b>	African sharptooth catfish LC <sub>50</sub> : 33.884 mg/L:96H
<b>Toxicity to daphnia and other aquatic invertebrates:</b>	Daphnia magna EC <sub>50</sub> : 49.1 mg/L:48H Green algae EC <sub>50</sub> : 184.6 mg/L:72H
<b>Toxicity to algae:</b>	
<b>Persistence and degradability:</b>	
<b>Biodegradability:</b>	No data available
<b>Bioaccumulative potential:</b>	
<b>Bioaccumulation:</b>	No data available
<b>Mobility in soil:</b>	No data available
<b>Other adverse effects:</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

#### 13 Disposal considerations

<b>Recommendation:</b>	Consult state, local or national regulation for proper disposal Allow professional disposal company to handle waste Must be specially treated under adherence to official regulations
<b>Unclean packagings recommendation:</b>	Disposal must be made according to official regulations

#### 14 Transport information

##### Land transport DOT

**Proper shipping name:** Chemicals Non-Hazardous  
**Technical name:** Calcium hydroxide

##### Air transport ICAO-TI and IATA-DGR:

**Proper shipping name:** Chemicals Non-Hazardous  
**Technical name:** Calcium hydroxide

##### UPS Ground / FedEx Ground

**Proper shipping name:** Chemicals Non-Hazardous  
**Technical name:** Calcium hydroxide

##### UPS Air

**Proper shipping name:** Chemicals Non-Hazardous  
**Technical name:** Calcium hydroxide

#### 15 Regulatory information

##### SARA Section 302 Extremely Hazardous

**components and corresponding TPQs:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

**SARA Section 311 / 312 hazards:** Acute Health Hazard

**SARA Section 313 components:** Not applicable

**California Proposition 65 components:** This product does not contain any chemicals known to the State of California to cause birth defects or any other reproductive harm.

**TSCA:** Product is listed on the TSCA Inventory

#### 16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.