



Material Safety Data Sheet

Lime water, saturated

Section 1 - Chemical Product and Company Identification

MSDS Name:

Lime water, saturated

Catalog Numbers:

LC16160

Synonyms:

Calcium hydroxide, saturated aqueous solution

Company Identification:

LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
1305-62-0	Calcium hydroxide	0.2
7732-18-5	Water	balance

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Colorless solution.*

Danger! Corrosive. Causes eye and skin burns. May causes digestive and respiratory tract burns. Eye contact may result in permanent eye damage.

Target Organs: *None.*

Potential Health Effects

Eye:

Causes severe eye burns. May cause irreversible eye injury. May cause temporary corneal clouding.

Skin:

May cause severe skin irritation or burns. May be harmful if absorbed through the skin.

Ingestion:

Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. May cause circulatory system failure. May cause perforation of the digestive tract.

Inhalation:

May cause severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Palpitation, inflammation, edema of the larynx and bronchi, chemical pneumonitis



Material Safety Data Sheet

Lime water, saturated

and pulmonary edema may result from inhalation exposure. Irritation may lead to chemical pneumonitis and pulmonary edema.

Chronic:

Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause corneal damage and the development of cataracts and glaucoma. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

Section 4 - First Aid Measures

Eyes:

Get medical aid at once. Immediately flush eyes with water lifting upper/lower lids occasionally until chemical is gone (at least 30 min.) Do not allow victim to rub eyes or keep eyes closed.

Skin:

Get medical aid at once. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing to reduce further exposure. Cover burns with a dry sterile bandage (loose, not tight).

Ingestion:

Do NOT induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Get medical aid at once. Move victim to fresh air immediately. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician:

Effects may be delayed. Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Substance is nonflammable. Runoff from fire control or dilution water may cause pollution.

Extinguishing Media:

In case of fire, use carbon dioxide, dry chemical, or appropriate foam.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 1305-62-0: Not published.

CAS# 7732-18-5: Not published.

Explosion Limits:

Lower: n/a Upper: na/

Section 6 - Accidental Release Measures



Material Safety Data Sheet Lime water, saturated

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Do not allow water to get into the container because of violent reaction. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Store in a cool, dry area. Store in a tightly closed container. Keep away from strong acids.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing the material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Calcium hydroxide	5 mg/m ³ TWA	5 mg/m ³ TWA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

OSHA Vacated PELs: Calcium hydroxide: 5 mg/m³ TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: Colorless to turbid white



Material Safety Data Sheet Lime water, saturated

Odor: Odorless.

pH: 12.4 @ 25 °C

Vapor Pressure: No information found.

Vapor Density: No information found.

Evaporation Rate: No information found.

Viscosity: No information found.

Boiling Point: No information found.

Freezing/Melting Point: No information found.

Decomposition Temperature: No information found.

Solubility in water: Soluble.

Specific Gravity/Density: 2.04

Molecular Formula: KOH

Molecular Weight: 56.10

Section 10 - Stability and Reactivity

Chemical Stability:

Stable at room temperatures in close containers under normal storage and handling conditions.

Readily absorbs carbon dioxide from air forming calcium carbonate.

Conditions to Avoid:

Incompatible materials, heat.

Incompatibilities with Other Materials:

Phosphorus, maleic anhydride, nitromethane, nitroethane, nitroparaffins, nitropropane, polychlorinated phenols + potassium nitrate, carbon dioxide, acids.

Hazardous Decomposition Products:

Calcium oxide.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 1305-62-0: EW2800000.

LD50/LC50:

CAS# 1305-62-0:

Draize test, rabbit, eye: 10 mg Severe,

Oral, mouse: LD50 = 7300 mg/kg,

Oral, rat: LD50 = 7340 mg/kg.

Carcinogenicity:

CAS# 1305-62-0: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

No information found.

Teratogenicity:

No information found.

Reproductive:

No information found.

Mutagenicity:

Cytogenic analysis: rat, Ascites tumor = 1200 mg/kg.

Neurotoxicity:

No information found.



Material Safety Data Sheet Lime water, saturated

Section 12 - Ecological Information

Ecotoxicity:

Mosquito fish: TLm=240 ppm/24H, 220 ppm/48H, 1160 ppm/96H at 21 –23 C.

Environmental:

This compound shows no bioaccumulation or food chain concentration toxicity potential. Aquatic toxicity is the function of an alkalinity effect. Addition of lime to soft water lakes has increased biological activity, possibly by providing a carbon dioxide reservoir. Calcium hydroxide does not degrade oxidatively; it is neutralized by absorption of atmospheric carbon dioxide.

Physical:

No information found.

Other:

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Corrosive liquid, basic, inorganic, nos

Hazard Class: 8

UN Number: UN3266

Packing Group: PG II

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 1305-62-0 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

None of the components have an RQ.

CERCLA/SARA Section 313:

None of the components are on this list.

OSHA - Highly Hazardous:

None of the components are on this list.

US State

State Right to Know:

Calcium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Regulations:



Material Safety Data Sheet Lime water, saturated

European/International Regulations

Canadian DSL/NDSL:

CAS# 1305-62-0 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 1305-62-0 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: August 23, 2006

Revision Date: None

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