

Material Safety Data Sheet

Calcium Hydroxide

ACC# 03980

Section 1 - Chemical Product and Company Identification

MSDS Name: Calcium Hydroxide

Catalog Numbers: AC219180000, AC219180010, AC219180025, AC219180050, AC219181000, AC219185000, AC385610000, AC385890000, AC403850000, AC403850010, AC403850050, C9710LC, S75410, S79944, S79944-1, S93163, C88-500, C97-10, C97-3, C97-500, C9750, NC9084862, NC9631110, NC9849186, NC9967764, XXC8820KG, XXC97150LB, XXC97FDPB75K, XXC97PDPB75KG

Synonyms: Biocalc; Calcium hydrate; Calcium dihydrate; Carboxide; Calcium dihydroxide; Caustic lime; Hydrated lime; Slaked lime; Kalkhydrate; Lime water; Lime milk

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1305-62-0	Calcium hydroxide	>95	215-137-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless solid.

Danger! Eye contact may result in permanent eye damage. Causes eye burns. Causes severe skin irritation. May cause severe respiratory and digestive tract irritation with possible burns.

Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye burns. May result in corneal injury. May cause permanent visual impairment.

Skin: May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May be harmful if absorbed through the skin.

Ingestion: May cause irritation of the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May be harmful if swallowed.

Inhalation: Causes respiratory tract irritation. May cause chemical bronchitis with coughing and difficulty in breathing.

Chronic: Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get

medical aid. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is nonflammable.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid breathing dust.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this 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 - Final PELs
Calcium hydroxide	5 mg/m3 TWA	5 mg/m3 TWA	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

OSHA Vacated PELs: Calcium hydroxide: 5 mg/m3 TWA (not in effect as a result of reconsideration)

Personal Protective Equipment

Eyes: Wear dust-proof goggles.

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 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: colorless

Odor: odorless

pH: 12.4 (sat. sol.)

Vapor Pressure: 0 mm Hg

Vapor Density: Not available.

Evaporation Rate: Negligible.

Viscosity: Not applicable.

Boiling Point: Not available.

Freezing/Melting Point: 580 deg C

Decomposition Temperature: Not available.

Solubility: Slightly soluble.

Specific Gravity/Density: 2.24 (Water=1)

Molecular Formula: CaH₂O₂

Molecular Weight: 74.09

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Readily absorbs carbon dioxide from air forming calcium carbonate.

Conditions to Avoid: High temperatures, dust generation, prolonged exposure to air.

Incompatibilities with Other Materials: Acids, phosphorus, maleic anhydride, nitromethane, nitroethane, nitroparaffins, nitropropane, some metals.

Hazardous Decomposition Products: Calcium oxide.

Hazardous Polymerization: Will not occur.

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 by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: See actual entry in RTECS for complete information.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. Mosquito fish, TLm=240 ppm/24H, 220 ppm/48H, 160 ppm/96H at 21-23C.

Environmental: No information reported.

Physical: No information available.

Other: None.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Calcium hydroxide)	CORROSIVE SOLID BASIC INORGANIC (CALCIUM HYDROXIDE)
Hazard Class:	8	8
UN Number:	UN3262	UN3262
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA

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

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPO.

SARA Codes

CAS # 1305-62-0: immediate.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 1305-62-0 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XI

Risk Phrases:

R 41 Risk of serious damage to eyes.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 39 Wear eye/face protection.

WGK (Water Danger/Protection)

CAS# 1305-62-0: 1

Canada - DSL/NDSL

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

Canada - WHMIS

This product has a WHMIS classification of E.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 1305-62-0 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 12/12/1997

Revision #6 Date: 3/15/2007

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.