

Material Safety Data Sheet

Calcium hydroxide, 98+%

ACC# 95944

Section 1 - Chemical Product and Company Identification

MSDS Name: Calcium hydroxide, 98+%

Catalog Numbers: AC219180000, AC219180010, AC219180025, AC219180050, AC219181000, AC219185000 AC219185000

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

Company Identification:

Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1305-62-0	Calcium hydroxide	>98	215-137-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white powder.

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

Target Organs: Eyes.

Potential Health Effects

Eye: May result in corneal injury. Contact with liquid or vapor causes severe burns and possible irreversible eye damage. May cause temporary corneal clouding.

Skin: Causes severe skin irritation and burns. May be harmful if absorbed through the skin.

Ingestion: Causes gastrointestinal tract burns. May cause circulatory system failure. May cause perforation of the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. Effects may be delayed.

Inhalation: Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Inhalation may produce burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Causes irritation of the mucous membrane and upper respiratory tract.

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

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed.

Skin: Get medical aid immediately. Wash clothing before reuse. Rinse area with large amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. 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: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is nonflammable. Runoff from fire control or dilution water may cause pollution.

Extinguishing Media: Use dry chemical.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

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.

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/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 (not in effect as a result of reconsideration)

Personal Protective Equipment

Eyes: Wear chemical splash 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: Powder

Appearance: white

Odor: odorless

pH: 12.4(sat.soln.@25°C)

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Negligible.

Viscosity: Not available.

Boiling Point: decomposes

Freezing/Melting Point: 580 deg C

Decomposition Temperature: Not available.

Solubility: Soluble.

Specific Gravity/Density: 2.2400g/cm³

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: Dust generation, temperatures above 30°C.

Incompatibilities with Other Materials: Phosphorus, maleic anhydride, nitromethane, nitroethane, nitroparaffins, nitropropane, polychlorinated phenols + potassium nitrate.

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

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

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

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. Mosquito fish, T1m=240 ppm/24H, 220 ppm/48H, 160 ppm/96H at 21-23C.

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 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.	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 TPQ.

SARA Codes

CAS # 1305-62-0: acute.

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 depleters.

This material does not contain any Class 2 Ozone depleters.

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:

C

Risk Phrases:

R 34 Causes burns.

Safety Phrases:

- S 22 Do not breathe dust.
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 28A After contact with skin, wash immediately with plenty of water.

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, D2B.

Canadian Ingredient Disclosure List

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

Section 16 - Additional Information
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MSDS Creation Date: 6/17/1999

Revision #3 Date: 3/04/2004

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.