

## SAFETY DATA SHEET

Preparation Date: 7/7/2015

Revision Date: 7/6/2018

Revision Number: G2

### 1. IDENTIFICATION

**Product identifier**

**Product code:** XX992  
**Product Name:** CALCIUM HYDROXIDE, REAGENT

**Other means of identification**

**Synonyms:** Calcium hydrate  
 Carboxide  
 Calcium dihydroxidede calcium (French)

**CAS #:** 1305-62-0  
**RTECS #** EW2800000  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Fireproofing coatings. water treatment. Buffering agent. In paper manufacture process. Chemical intermediate. In dental cement. In lubricants. In mortar, plaster, cement and other building and paving materials. In fungicides. In pesticides. In SBR rubber vulcanization.

**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

**Label elements**

**Danger**

**Hazard statements**

Causes skin irritation  
Causes serious eye damage  
May cause respiratory irritation



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear protective gloves  
Wear eye/face protection

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  
IF ON SKIN: Wash with plenty of water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS-No.	Weight %
Calcium Hydroxide	1305-62-0	100

**4. FIRST AID MEASURES**

**First aid measures**

**General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call

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1-800-222-1222.

- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.
- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

- Symptoms**
- Causes skin irritation
  - Causes serious eye damage
  - Risk of serious damage to eyes
  - Irritating to respiratory system
  - Causes digestive (gastrointestinal) tract irritation
  - Can burn mouth, throat, and stomach
  - Severe abdominal pain
  - Vomiting
  - May cause diarrhea

**Indication of any immediate medical attention and special treatment needed**

- Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

- Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

- Unsuitable Extinguishing Media:** No information available.

**Specific hazards arising from the chemical**

- Hazardous Combustion Products:** No information available.

- Specific hazards:** No information available.

**Special Protective Actions for Firefighters**

- Specific Methods:** No information available.

- Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Neutralize the residue with a dilute solution of acetic acid. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

#### **Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

#### **Incompatible Materials:**

Oxidizing agents  
Metals  
Acids  
Organic anhydride  
Aldehydes  
Acrolein  
Acetaldehyde  
Trichloroethylene  
Tetrahydrofuran  
Phosphorus  
Halogenated organic compounds  
Nitro compounds  
Potassium nitrate

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **National occupational exposure limits**

## United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Calcium Hydroxide	1305-62-0	15 mg/m <sup>3</sup> TWA 5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	None

## Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Calcium Hydroxide	1305-62-0	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	None	None

## Australia and Mexico

Components	CAS-No.	Australia	Mexico
Calcium Hydroxide	1305-62-0	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA

## Appropriate engineering controls

**Engineering measures to reduce exposure:** Ensure adequate ventilation, especially in confined areas.

## Individual protection measures, such as personal protective equipment

### Personal Protective Equipment

- Eye protection:** Goggles
- Skin and body protection:** Chemical resistant apron  
Gloves  
Long sleeved clothing
- Respiratory protection:** Effective dust mask. or. Wear respirator with dust filter.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Solid	<b>Appearance:</b> Powder.	<b>Color:</b> White.
<b>Odor:</b> Odorless.	<b>Taste</b> Bitter. Alkaline. Slight.	<b>Formula:</b> Ca(OH) <sub>2</sub>
<b>Molecular/Formula weight:</b> 74.1 g/mole	<b>Flammability:</b> No information available	<b>Flashpoint (°C/°F):</b> No information available.
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> No information available	<b>Decomposition temperature(°C/°F):</b> 580°C (1076°F)
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> No information available	<b>Density (g/cm<sup>3</sup>):</b> No information available
<b>Specific gravity:</b> 2.24	<b>pH:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available

**Evaporation rate:**  
No information available

**Vapor density:**  
No information available

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
No information available

**Partition coefficient  
(n-octanol/water):**  
No information available

**Viscosity:**  
No information available

**Miscibility:**  
No information available

**Solubility:**  
Very slightly soluble in cold water  
Very slightly soluble in hot water  
Insoluble in Alcohol  
Soluble in ammonium salt solutions  
Soluble in Glycerol  
Soluble in sugar or ammonium chloride solution  
Soluble in acids with evolution of much heat.  
Solubility in water: 0.185g/ 100mL @0°C  
Solubility in water: 0.077g/ 100mL @100°C  
Solubility in water:1.6-1.73g/ 100mL @20°C

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents

Reactive with metals

Reactive with acids

Incompatible with organic anhydrides (e.g. acetic anhydride, maleic anhydride), aldehydes, acrolein, acetaldehyde, trichloroethylene, tetrahydrofuran, phosphorous, halogenated organic compounds, nitro compounds (e.g. nitromethane, nitroparaffins, nitropropane), polychlorinated phenols, and potassium nitrate

When chlorinated phenols are heated for analytical purposes with calcium hydroxide-potassium nitrate mixtures, chlorinated benzodioxins analogous to extremely toxic tetrachlorodibenzodioxin may be formed.

Loses water when ignited to form Calcium Oxide.

Contact with metals may evolve flammable hydrogen gas

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Incompatible materials.

**Incompatible Materials:** Oxidizing agents  
Metals  
Acids  
Organic anhydride  
Aldehydes  
Acrolein  
Acetaldehyde  
Trichloroethylene  
Tetrahydrofuran  
Phosphorus  
Halogenated organic compounds  
Nitro compounds  
Potassium nitrate

**Hazardous decomposition products:** No information available.

**Other Information**  
**Corrosivity:** Non-corrosive in the presence of glass

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Inhalation. Ingestion. Skin.

### Acute Toxicity

#### Component Information

Calcium Hydroxide	
CAS-No.	1305-62-0

**LD50/oral/rat** = 7340 mg/kg Oral LD50 Rat  
**LD50/oral/mouse** = 7300 mg/kg Oral LD50 Mouse  
**LD50/dermal/rabbit** = No information available  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50 information** = No information available

#### Product Information

**LD50/oral/rat** =  
**VALUE- Acute Tox Oral** = 7340 mg/kg

**LD50/oral/mouse** =  
**Value - Acute Tox Oral** = 7300 mg/kg

**LD50/dermal/rabbit**  
**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**  
**VALUE -Acute Tox Dermal** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**VALUE-Gas** = No information available  
**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**  
**VALUE-Vapor** = No information available  
**VALUE - Gas** = No information available  
**VALUE - Dust/Mist** = No information available

### Symptoms

**Skin Contact:** Causes skin irritation. Alkalies penetrate skin slowly. The extent of damage depends on the duration of contact.

**Eye Contact:** Causes serious eye irritation. Risk of serious damage to eyes. May cause "Lime Burns" of the eye. Clumps may lodge deep in the recesses of the eye, releasing calcium hydroxide over a long period of time. Severe burns of the cornea with possible damage to corneal nerves may occur.

**Inhalation** Causes severe irritation of the respiratory tract (nose, throat, lungs), and mucous membranes with coughing, wheezing and/or shortness of breath. The material may be destructive to tissue of the mucous membranes and upper respiratory tract.

**Ingestion** Causes gastrointestinal tract irritation with vomiting, diarrhea, severe pain. Vomitus may contain blood and desquamated mucosal lining. May cause delayed gastrointestinal burns and perforation (gastric or esophageal) with severe abdominal pain and rapid fall in blood pressure.

**Aspiration hazard** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** Prolonged skin contact may cause skin irritation and/or dermatitis.

**Sensitization:** No information available.

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Calcium Hydroxide	1305-62-0	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** STOT - single exposure. Respiratory system.

**STOT - repeated exposure** No information available.

**Target Organs:** No information available.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**



**Ecotoxicity effects:** Aquatic environment.

*Calcium Hydroxide - 1305-62-0*

**Freshwater Fish Species Data:** 160 mg/L LC50 *Gambusia affinis* 96 h static 1

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

### 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

**Waste from residues / unused products:**  
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**  
Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Calcium Hydroxide	1305-62-0	None	None	None	None

### 14. TRANSPORT INFORMATION

#### DOT

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Class:** No information available

**Packing group:** No information available

**Emergency Response Guide Number:** No information available

**Marine Pollutant:** No data available

**DOT RQ (lbs):** No information available

**Special Provisions:** No Information available

**Symbol(s):** No information available

**Description:** No information available

#### TDG (Canada)

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Risk:** No information available

**Packing Group:** No information available

**Marine Pollutant:** No Information available

**Description:** No information available

#### ADR

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Packing Group:** No information available

**Subsidiary Risk:** No information available

**IMO / IMDG**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No information available

**RID**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available

**ICAO**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available

**IATA**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**ERG Code:** No information available  
**Special Provisions** No information available

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Calcium Hydroxide	1305-62-0	Present ACTIV E	Present KE-04518	Present	Present (1)-181	Present	Present	Present 215-137-3

**U.S. Regulations***Calcium Hydroxide*

**Massachusetts RTK:** Present

**New Jersey RTK Hazardous Substance List:** 0322

**Pennsylvania RTK:** Present

**Minnesota - Hazardous Substance List:** Present

**California Directors List of Hazardous Substances:** Present

**FDA - Food Additives Generally Recognized as Safe (GRAS):** 21 CFR 184.1205

**FDA - 21 CFR - Total Food Additives** 135.110, 176.180, 176.210, 184.1205, 73.85

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.****Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Calcium Hydroxide	1305-62-0	Not Listed	Not Listed	Not Listed	Not Listed

#### CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Calcium Hydroxide	1305-62-0	None	None	None	None	None

#### U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Calcium Hydroxide	1305-62-0	Not Applicable	Not Applicable

#### Canada

##### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component  
Calcium Hydroxide  
1305-62-0 ( 100 )

WHMIS 2015 Hazard Classification  
Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

##### WHMIS 1988 Hazard Class

E Corrosive material

**Components**  
Calcium Hydroxide

WHMIS 1988  
E

##### Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Calcium Hydroxide	1 %

#### Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Calcium Hydroxide	1305-62-0	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Calcium Hydroxide	1305-62-0	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Calcium Hydroxide	1305-62-0	Not listed

#### EU Classification

Product code: XX992

Product name: CALCIUM  
HYDROXIDE, REAGENT

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Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Calcium Hydroxide	1305-62-0	No information

## EU - CLP (1272/2008)

**R-phrase(s)**

R41 - Risk of serious damage to eyes.

R38 - Irritating to skin.

**S -phrase(s)**

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Calcium Hydroxide	1305-62-0		No information	

**The product is classified in accordance with Annex VI to Directive 67/548/EEC****Indication of danger:**

Xi - Irritant.

Xi

**16. OTHER INFORMATION**

Preparation Date: 7/7/2015  
Revision Date: 7/6/2018  
Prepared by: Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**