

MATERIAL SAFETY DATA SHEET

Calcium Hydroxide

SECTION 1 . Product and Company Identification

Product Name and Synonym: Calcium Hydroxide
Product Code: C0713
Material Uses:
Manufacturer: Science Stuff
1104 Newport Ave
Austin, TX 78753
(512) 837-6020
Entry Date : 5/29/2013
Print Date: 5/29/2013
24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	3			
Flammability:	0			
Reactivity:	0			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA=Not Applicable		NE=Not Established		

SECTION 2 HAZARD IDENTIFICATION

Causes severe irritation and burns. Harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Physical state: Solid. (Powder)
Odor: Odorless
OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview:

DANGER!
CAUSES EYE AND SKIN BURNS.
HARMFUL IF INHALED OR SWALLOWED.
CAUSES RESPIRATORY TRACT IRRITATION.
CAUSES DAMAGE TO THE FOLLOWING ORGANS:
MUCOUS MEMBRANES, RESPIRATORY TRACT, SKIN, EYES, LENS OR CORNEA.

Do not ingest. Do not get in eyes or on skin or clothing.
Avoid breathing dust.
Keep container closed.
Use only with adequate ventilation. Wash thoroughly after handling.

Routes of entry:
Inhalation. Ingestion.

Potential acute health effects:

Eyes: Corrosive to eyes.
Skin: Corrosive to the eyes.
Inhalation: Toxic by inhalation. Severely irritating to the respiratory system.
Ingestion: Toxic by swallowed. May cause burns to mouth, throat and stomach
Carcinogenicity: No known significant effects or critical hazards
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity/ Reproductive toxicity: No known significant effects or critical hazards.
Medical conditions aggravated by over-exposure:
Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage.
Repeated or prolonged exposure to the substance can produce target organs damage.
Repeated exposure of the eyes to a low level of dust can produce eye irritation.

SECTION 3 MIXTURE COMPONENTS

Calcium Hydroxide

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Calcium Hydroxide	CAS# 1305-62-0	100%	W/W	OSHA TWA 5 mg/mf

SECTION 4 FIRST AID MEASURES

Causes severe irritation and burns. Harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: CALL A PHYSICIAN. SKIN: In case of contact, immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type:	Any means suitable for extinguishing surrounding fire
Fire / Explosion Hazards:	None Known.
Fire Fighting Procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Carefully pick up solid with minimum of dusting and collect in metal container with covers with disposal. The trace amount of residue can be flushed down drain.

Personal precautions: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up: If emergency personnel are unavailable, vacuum or carefully scoop up material and place in an appropriate container for disposal by incineration. Avoid creating dusty conditions and prevent wind dispersal.

SECTION 7 HANDLING AND STORAGE

Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Store away from acids.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection:	Dust mask recommended.
Ventilation	Local Exhaust <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/>
Protective Gloves:	Wear appropriate gloves to prevent skin exposure
Eye Protection:	Safety Glasses w/ Side Shields

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Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

Consult local authorities for acceptable exposure limits.
Engineering measurers: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal Protection

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Recommended: face shield safety glasses with side-shields

Skin: Personal protective equipment for the body should be selected based on the task being performed and risks involved and should be approved by a specialist before handling this product.
Body recommended:
safety apron
Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Recommended: nitrile rubber
Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	Information not available	Percent Volatile by Volume:	0%
Boiling Point:	2850 Deg C	Evaporation Rate	Not applicable
Vapor Pressure:	Information not available	Evaporation Standard	
Vapor Density:	Information not available	Auto Ignition Temp	Not applicable
Solubility in Water:	0.1 g/ 100 g	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	White powder, low odor	Upper Flamm. Limit in Air	Not applicable
Flash Point:	Not Flammable		
Specific Gravity:	2.2-2.6		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability: Stable

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Conditions to Avoid:	Avoid contact with incompatible materials.
Materials to Avoid:	Boric oxide, acids, fluorine, and many organic materials.
Hazardous Decomposition Products:	Not known to occur
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

SECTION 11 Toxicological Information

Toxicity data- United States- Product/ ingredient name:

Calcium Hydroxide
LD50 7340 mg/kg Oral Rat
LD50 7300 mg/kg Oral Mouse

Chronic effects on humans:

Contains material which causes damage to the following organs: mucous membranes, upper respiratory tract, skin, eye, lens or cornea.

Specific effects

Carcinogenic effects: No known significant effects or critical hazards

Mutagenic effects: No known significant effects or critical hazards

Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards

Sensitization

Ingestion: No known significant effects or critical hazards

Inhalation: Severely irritating to respiratory system.

Eyes: Corrosive to eyes.

Skin: Corrosive to the skin

SECTION 12 Ecological Information

Environmental precautions: No known significant effects or critical hazards.

Products of degradation:

Some metallic oxides.

Toxicity of the products of biodegradation: The products of degradation are less toxic than the product itself.

SECTION 13 Disposal Considerations

Waste disposal: the generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-product should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

SECTION 14 Transport Information

DOT Classification: Not Regulated

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

United States

HCS Classification:

Corrosive material

Target organ effects

Toxic material

U.S. Federal regulations:

United States inventory (TSCA 8b): listed

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SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notifications: No products were found.
SARA 302/304/311/312 hazardous chemicals: Calcium Hydroxide
SARA 311/312 MSDS distribution- Chemical inventory- hazard identification: Calcium Hydroxide
Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substance: No products were found.
Clean Air Act (CAA) 112 regulated toxic substance: No products were found.
State regulations:
Pennsylvania RTK: Calcium Hydroxide
(environmental hazard, generic environmental hazard);
Massachusetts RTK: Calcium Hydroxide
New Jersey: Calcium Hydroxide
Canada
WHMIS (Canada) :
Class E: Corrosive material
CEPA DSL/ CEPA NDSL : CEPA DSL: Calcium Hydroxide
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

SECTION 16

Additional Information

Flammability

Health

Reactivity

Revisions

NFPA

0.1

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