Safety Data Sheet

Safety Data Sheet (in compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010)

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1. PRODUCT IDENTIFICATION

Trade Name (as labeled):	**Calcium Hydroxide**
Chemical Name/Classification:	Calcium Hydroxide
Product Identifier (Part/Item Number):	10301 (2 oz.)
U.N. Number:	None
U.N. Dangerous Goods Classification:	None
Recommended Use:	Used in restoration procedures
Restrictions on Use:	For professional use only
Manufacturer/Supplier Name:	Sultan Healthcare
Manufacturer/Supplier Address:	411 Hackensack Avenue, 9th Floor Hackensack, NJ
Manufacturer/Supplier Telephone Number:	1-201-871-1232 or 800-637-8582 (Product Information)
Emergency Contact Telephone Number:	800-535-5053 (INFOTRAC) 1-352-323-3500 (Outside the United States)
Email address:	customer.service@sultanhc.com

2. HAZARD(s) IDENTIFICATION

Hazard/Danger Classification (Regulation EC) No. 1272/2008 [CLP]:

Health	Environmental	Physical
Eye Damage Category 1	None	None

EU Classification (67/548/EEC as amended): Irritant (Xi)

EU Risk (R) and Safety (S) Phrases: R41, S26, S39

Refer to Section 16 for the full text of the EU Classifications and R Phrases.

Label Elements:

Signal Word: DANGER!

Hazard Statements	Precautionary Statements
H318 Causes serious eye damage.	P280 Wear protective gloves/protective clothing/eye protection/face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician.



Contains Calcium Hydroxide

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Components	C.A.S. # EC#	IUPAC Name	WT %
Calcium Hydroxide	1305-62-0 / 215-137-3	calcium dihydroxide	100

Refer to Section 16 for the full text of the GHS and H phrases and EU Classifications and R Phrases.

4. FIRST-AID MEASURES

Routes of Exposure	First Aid Instructions
Eye	Immediately flush eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get immediate medical attention
Skin	Wash skin thoroughly with soap and water. Get medical attention if irritation develops. Remove and launder clothing before re-use.
Inhalation	Remove victim to fresh air. If breathing is difficult or irritation persists, get medical attention**.**
Ingestion	Do not induce vomiting. Rinse mouth with water and give one glass of water to drink. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention
Most important symptoms of exposure	May cause severe eye irritation with possible burns. May cause skin irritation or burns, especially on moist skin. Inhalation of dusts may cause respiratory irritation.
Other	None known.
Note to Physicians (Treatment, Testing, and Monitoring): Treatment of overexposure should be directed at the control of symptoms and clinical conditions.	

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Use media appropriate for surrounding fire.
Fire Fighting Procedures:	Cool fire exposed containers with water.
Specific Hazards Arising from the Chemical:	None known.
Precautions for Fire Fighters:	Firefighters should wear positive pressure self-contained breathing apparatus and full

	protective clothing.

Recommended Protective Equipment for Fire Fighters:			
EYES/FACE	SKIN	RESPRIATORY	THERMAL
			

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, PPE and Emergency Procedures: Keep unprotected people away from spill area. Wear appropriate protective clothing; gloves and eye protection. Large spills may require use of respiratory protection.
Environmental Precautions: Prevent spill from entering sewers and water courses. Report releases as required by local and federal authorities.
Methods and Materials for Containment and Clean-up: Vacuum or sweep up spilled material for reuse or disposal. Avoid creation of airborne dusts. Place in an appropriate container for disposal.
Recommended Personal Protective Equipment for Containment and Clean-up:

EYES/FACE	SKIN	RESPRIATORY	THERMAL
			

7. HANDLING AND STORAGE

Precautions for Safe Handing: Avoid contact with the eyes, skin and clothing. Avoid breathing dusts. Wear protective clothing and equipment. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.
Conditions for Safe Storage: Store in a cool, dry, well ventilated area away from incompatible materials. Protect from physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Calcium Hydroxide	United States	5 mg/m3 TWA ACGIH TLV 5 mg/m3 TWA OSHA PEL (respirable fraction), 15 mg/m3 TWA OSHA PEL (total dust)
	Germany	None Established
	United Kingdom	5 mg/m3 TWA UK OEL
	France	5 mg/m3 TWA INRS VME
	Spain	5 mg/m3 TWA VLA-ED
	Italy	None Established
	European Union	None Established

Biological Exposure Limits: None Established

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Individual Protection Measures (PPE)

Specific Eye/face Protection: Chemical safety goggles recommended.

Specific Skin Protection: Wear impervious gloves such as rubber or neoprene. Recommended glove: rubber or neoprene. Consult glove supplier for thickness and breakthrough times.

Specific Respiratory Protection: In operations where exposure levels are exceeded, an approved respirator with dust/mist cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.

Specific Thermal Hazards: Not applicable

Recommended Personal Protective Equipment:

EYES/FACE	SKIN	RESPRIATORY	THERMAL
			

Environmental Exposure Controls: None required for normal use conditions.

General Hygiene Considerations and Work Practices: Avoid contact with the eyes, skin and clothing. Avoid breathing dusts. Wash thoroughly with soap and water after handling.

Protective Measures During Repair and Maintenance of Contaminated Equipment: Wear protective clothing and equipment as described in Section 8. Wash thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White crystals or powder	**Explosive limits:**	Not applicable
Odor:	Odorless	**Vapor pressure:**	Not applicable
Odor threshold:	No data available	**Vapor density:**	Not applicable
pH:	12.4 (saturated solution)	**Relative density:**	2.24
Melting/freezing point:	1076°F / 580°C	**Solubility:**	0.185 g/100 ml water
Initial boiling point and range:	Decomposes	**Partition coefficient: n-octanol/water:**	Not available
Flash point:	Not flammable	**Auto-ignition temperature:**	Not applicable
Evaporation rate:	Not applicable	**Decomposition temperature:**	1076°F / 580°C
Flammability:	Not flammable	**Viscosity:**	Not applicable
Explosive Properties:	None	**Oxidizing Properties:**	Not available

10. STABILITY AND REACTIVITY

Reactivity: Will not polymerize.
Chemical Stability: Stable.
Possibility of Hazardous Reactions: Reacts with water releasing heat.
Conditions to Avoid: None known.
Incompatible materials: Reacts violently with acids. Attacks many metals in presence of water forming flammable hydrogen gas. May attack plastics.
Hazardous Decomposition Products: Produces calcium oxide when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: May cause severe irritation or burns with pain and tearing. Corneal damage or blindness may occur.

Skin: Causes skin irritation. May cause burns especially in contact with moist skin for prolonged periods. Not irritating in an EU CLP OECD 404 study for irritancy.

Ingestion: Swallowing may cause severe pain, vomiting, diarrhea, fall in blood pressure and death.

Inhalation: Inhalation of dust may cause irritation or burns to the upper respiratory tract. May cause chemical bronchitis.

Chronic Health Effects: Prolonged contact with dilute solutions may cause dermatitis.

Carcinogenicity: None of the components is listed as a carcinogen by IARC, NTP, OSHA< ACGIH or the EU Substances Directive.

Mutagenicity: No data available.

Medical Conditions Aggravated by Exposure: Employees with pre-existing eye and skin disorders may be at increased risk from exposure.

Acute Toxicity Data: Oral rat LD50 7,340 mg/kg

Reproductive Toxicity Data: No data available.

Specific Target Organ Toxicity (STOT):

Single Exposure: 10% calcium hydroxide was severely irritating or corrosive when administered directly to the central corneal surface of rabbit eyes.

Repeated Exposure: No data available.

12. ECOLOGICAL INFORMATION

Toxicity: No data available

Persistence and Degradability: Calcium hydroxide does not degrade. It is neutralized by adsorption of atmospheric carbon dioxide.

Bio-accumulative Potential: Calcium hydroxide shows no bioaccumulation or food chain concentration toxicity potential.

Mobility in Soil: Calcium hydroxide reacts with carbon dioxide to form calcium carbonate, which is a naturally occurring material.

Other Adverse Effects: The high pH of this product will cause effects in aquatic systems and eco-systems.

Results of PBT/vPvB Assessment: Not regulated.

13. DISPOSAL CONSIDERATIONS

Regulations: Dispose in accordance with local, state and federal environmental regulations
Properties (Physical/Chemical) Affecting Disposal: This product is a strong base.
Waste Treatment Recommendations: Neutralize before discharge to sewer.

14. TRANSPORT INFORMATION

UN-Number	ADR/RID: None	IMDG: None	IATA: None	DOT: None
UN proper shipping name	ADR/RID: Not Regulated IMDG: Not Regulated IATA: Not Regulated DOT: Not Regulated			
Transport hazard class(es)	ADR/RID: None	IMDG: None	IATA: None	DOT: None
Packaging group	ADR/RID: None	IMDG: None	IATA: None	DOT: None
Environmental hazards	ADR/RID: None	IMDG Marine pollutant: No	IATA: None	DOT: None
Special precautions for user: Not applicable				

15. REGULATORY INFORMATION

U.S. Federal Regulations

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): Not listed

Toxic Substances Control Act (TSCA): All of the ingredients in this product are listed on the EPA TSCA Inventory.

OSHA Hazard Classification: Corrosive

Clean Water Act (CWA): Not Listed

Clean Air Act (CAA): Not Listed

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Immediate Hazard:	**Yes**	**Pressure Hazard:**	**No**
Delayed Hazard:	**No**	**Reactivity Hazard:**	**No**
Fire Hazard:	**No**		

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
None		

State Regulations

California: This product contains the following chemicals(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Components	C.A.S. #	WT %
None		

International Regulations

Canadian Environmental Protection Act: All the components of this product are listed on the Canadian DSL.

Canadian Workplace Hazardous Materials Information System (WHMIS): Class D, Division 2B (Eye and skin Irritant)

EU REACH: The substances in this product comply with the EU REACH regulation as applicable.

16. OTHER INFORMATION

Full text of Classification abbreviations used in Section 2 and 3:

Xi Irritant
R41 Risk of serious damage to eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39 Wear eye/face protection.

Date of SDS Preparation/Revision: 26 August 2011

Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, IUCLID Dataset EU Chemical Bureau, ESIS, Country websites for occupational exposure limits.