SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Calcium oxide
CAS number	1305-78-8
Synonyms	No information available

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Specific Target Organ Toxicity - single exposure	Category 3

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	Causes severe skin burns and eye damage.
Precautionary statements	
Prevention	Do not breathe dust/fumes/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face
Reponse	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash conatminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breahting. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	Dispoes of contents/contianer to an appropriate treatment and disposal facility in accordance with appicable laws and regulations, and product characeristics at time of disposal.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No information available

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Calcium oxide	-	1305-78-8	90-100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Move to fresh air. If breathing is difficult, give oxygen. Apply artificial respiration if victim is not breathing. Call a physician or poison control center immediately.

In case of skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
In case of eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. In case of irritaiton from airborne exposure, move
If swallowed	Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin and eye burns. Causes digestive tract burns. Mist or vapor extremely irritating to eyes and respriatory tract.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may be delayed/

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Carbon dioxide or dry powder. Foam.
Unsuitable extinguishing medi	The product reacts with water and will generate heat.

5.2 Specific hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed. Product is corrosive. Wear appropriate protective gear is spilled during fire fighting.

5.3 Special protective equipment and precautions for firefighters

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

5.4 Further information

Flash Point	No information availabe
Autoignition Temperature	No information available

Explosion limits

Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

NFPA

Health	Flammability	Instability	Physical hazards
3	0	1	W

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unauthorized personnel away. Keep upwind. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. See Section 8 of the SDS for Personal Protective Equipment.

6.2 Environmental precautions

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and materials for containment and cleaning up

Avoid dust formation. Do not get water on spilled substance or inside containers. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear protectve gloves/protective clothing/eye protection/face protection. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using the product. Add material slowly when mixing with water. Do not add water to the material; instead, add the material to the water. See Section 8 of the SDS for personal protective equipment.

Hygiene measures

Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Do not get this material in contact with skin. Do not get in eyes.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep away from food, drink and animal feeding stuffs. Keep containers tightly closed. Store in a cool and well-ventilated place.

Incompatibilities

No information available

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Calcium oxide	PEL	5 mg/m3
	TWA	5 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Calcium oxide	TWA	2 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Calcium oxide	REL	2 mg/m3

Biological occupational exposure limits
No information available

8.2 Exposure controls

Appropriate engineering controls
No data available

Personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

Skin protection
Chemical resistant gloves. Wear suitable protective clothing.

Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with a high efficiency particulate filter.

Control of environmental exposure
No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid, powder.
Appearance	White.

Odor	Odorless.
Odor Threshold	No information available
pH	12.8 (saturated solution in water)
Melting Point/Range	2572 °C
Boiling Point/Range	2850 °C
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Density	3.37 (20 °C)
Solubility	1.19 g/l (25 °C)
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	No information available
Molecular Formula	CaO
Molecular Weight	56.08 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Reacts with water.

10.2 Chemical stability
Material is stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous polymerization does not occur. Reacts with water.

10.4 Conditions to avoid
Moisture. Reacts violently with strong acids.

10.5 Incompatible materials
Moisture. Oxidizing agents. Acids. Halogens. Alcohols.

10.6 Hazardous decomposition products
Oxides of calcium.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium oxide	-	-	-

Skin corrosion/irritation
Causes severe skin burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Calcium oxide	1305-78-8	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure
Respiratory tract.

Specific target organ toxicity - repeated exposure
None known.

Reproductive toxicity
No components toxic to reproduction.

Chronic effects
No information available

11.2 Additional Information
No information available.

SECTION 12: Ecological information

12.1 Toxicity
No information available

12.2 Persistence and degradability
There is no data on the degrability of this product.

12.3 Bio accumulative potential
No data available on bioaccumulation.

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
No information available

12.6 Endocrine disrupting properties
No information available

12.7 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US) Not regulated

IMDG Not regulated

IATA

UN-No	UN1910
Proper Shipping Name	CALCIUM OXIDE
Hazard Class	8
Packing Group	III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Listed, Acute (Immediate) Hazard.

SARA 313 (TRI reporting)

Not listed.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed

US state regulations

US. Massachusetts RTK - Substance List

Listed

US. New Jersey Worker and Community Right-to-Know Act

Listed

US. Pennsylvania Worker and Community Right-to-Know Law

Listed

California Proposition 65

Not listed

SECTION 16: Other information

Issue Date: 10/10/2019
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SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.