

1. Product and Company Identification

Product identifiers

Product name: Calcium peroxide

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

Identified uses: Environmental application, water treatment and soil/ground oxidation.

Details of the supplier of the safety data sheet

Company: Compass Remediation Chemicals
2028 East Ben White Blvd
#240-1974
Austin, TX 78741
Telephone: (866) 221-9167

Emergency telephone number

Emergency Phone #: CHEMTREC 1-800-424-9300

2. Hazards Identification

Classification of the substance or mixture

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

Oxidizing solids (Category 3), H272 Acute toxicity, Oral (Category 4), H302 Serious skin burns, eye damage (Category 1), H314 Serious eye damage (Category 1), H318 Specific target organ toxicity-single exposure (Category 3), Respiratory system, H335 For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements Pictogram



Signal word Danger

Hazard statements

H272 May intensify fire; oxidizer.
H314 Causes severe skin burns and eye damage
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

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Precautionary statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat.
P220	Keep/Store away from clothing/combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+P361+P353	IF ON SKIN: Take off all contaminated clothing immediately. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see the supplemental first aid instruction)
P330	Rinse mouth
P363	Wash contaminated clothing before reuse
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS- none

Emergency Overview: Oxidizing agent, contact with other material may cause fire. Under fire conditions this material may decompose and release oxygen that intensifies fire.

Potential Health Effects:

General	Irritating to mucous membrane and eyes.
Inhalation	Irritating to the respiratory tract.
Eye Contact	May cause irritation to the eyes; Risks of serious or permanent eye lesions.
Skin Contact	May cause skin irritation.
Ingestion	Irritation of the mouth and throat with nausea and vomiting.

3. Composition/Information on Ingredients

<u>Ingredients</u>	<u>Chemical Formula</u>	<u>CAS No.</u>	<u>Percentage</u>
Calcium Peroxide	CaO ₂	1305-79-9	Min.75.0
Calcium Hydroxide	Ca(OH) ₂	1305-62-0	Max.25.0

4. First-Aid Measures

Inhalation	Remove affected person to fresh air. Seek medical attention if effects persist.
Eye Contact	Flush eyes with running water for 15 minutes with eyelids held open. Seek specialist advice.
Skin Contact	Wash affected skin with soap and mild detergent and large amounts of water.
<u>Ingestion</u>	If the person is conscious and not convulsing, give 2-4 cupfuls of water to dilute the chemical and seek medical attention immediately. Do not induce vomiting.

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5. Fire Fighting Measure

Flash Point: Not applicable

Flammability: Not applicable

Ignition Temperature: Not applicable

Danger of Explosion: Non-explosive

Extinguishing Media: Water

Fire Hazards: Oxidizer. Storage vessels involved in a fire may vent gas or rupture due to internal pressure. Damp material may decompose exothermically and ignite combustibles. Oxygen release due to exothermic decomposition may support combustion. May ignite other combustible materials. Avoid contact with incompatible materials such as heavy metals, reducing agents, acids, bases, combustibles (wood, papers, cloths, etc.). Thermal decomposition releases oxygen and heat. Pressure bursts may occur due to gas evolution. Pressurization if confined when heated or decomposing. Containers may burst violently.

Fire-Fighting Measures:

Evacuate all non-essential personnel

Wear protective clothing and self-contained breathing apparatus

Remain upwind of fire to avoid hazardous vapors and decomposition products

Use water spray to cool fire-exposed containers

6. Accidental Release Measures

Spill Clean-up Procedures: Oxidizer. Eliminate all sources of ignition. Evacuate unprotected personnel from equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Shovel or sweep material into plastic bags or vented containers for disposal. Do not return spilled or contaminated material to inventory.

Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Do not touch or walk through spilled material. Keep away from combustibles (wood, paper, oils, etc.). Do not return any product to container because of the risk of contamination.

7. Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Prevent contact with combustible or organic materials. Label containers and keep them tightly closed when not in use. Wash thoroughly after handling.

Storage: Oxidizer. Store in a cool, well-ventilated area away from all sources of ignition and out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Protect from moisture. Do not store near combustible materials. Keep containers well sealed, seal only with original vent cap. Ensure pressure relief and adequate ventilation. Store separately from organics and reducing materials. Avoid contamination, which may lead to decomposition.

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8. Exposure Controls/Personal Protection

Engineering Controls: General room ventilation is required. Local exhaust ventilation, process enclosures or other engineer controls may be needed to maintain airborne levels below recommended exposure limits. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Respiratory Protection: For many conditions, no respiratory protection may be needed; however, in dusty or unknown atmospheres or when exposures exceed limit values, wear a NIOSH approved respirator.

Eye/Face Protection: Wear chemical safety goggles and a full-face shield while handling this product.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant (Recommended materials: PVC, neoprene or rubber.)

Other Protective Equipment:

Eye-wash station
Safety shower
Impervious clothing
Rubber boots

General Hygiene Considerations: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. Physical and Chemical Properties

Appearance:	White or yellowish powder
Odor:	None
Bulk Density:	500~650 g/L
Solubility in water:	Insoluble
PH, 3% Solution:	Approx.12
Decomposition Temperature:	Self-accelerating decomposition with oxygen release starting from 275 °C

10. Stability and Reactivity

Stability: Stable under normal conditions

Conditions to Avoid:

Water
Acids Base
Salts of heavy metals
Reducing agents
Organic materials
Flammable substances

Hazardous Decomposition Products: Oxygen which supports combustion.

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11. Toxicological Information

LD50 Oral: Min.2000 mg/kg, rat

LD50 Dermal: Min. 2000 mg/kg, rabbit

LD50 Inhalation: Min. 4580 mg/kg, rat

Acute toxicity of over-exposure: Dust is irritating to eyes, nose, throat and lungs.

Chronic toxicity: No known effect

Carcinogenicity: There are no known carcinogenic chemicals in this product.

12. Ecological Information

Ecotoxicological Information: Hazard to the environment is limited due to the product properties of no bioaccumulation, weak solubility and precipitation in aquatic environment.

Chemical Fate Information: As indicated by chemical properties oxygen is released into the environment.

13. Disposal Considerations

Waste Treatment: Dispose of in an approved waste facility operated by an authorized contractor in compliance with local regulations.

Package Treatment: The empty and clean containers are to be recycled or disposed of in conformity with local regulations.

14. Transport Information

DOT (US)

UN number: 1457 Class:5.1 Packing group: II

Proper shipping name: Calcium Peroxide

Marine pollutant: No

Poison inhalation hazard: No

TDG

UN number: 1457 Class:5.1 Packing group: II

Proper shipping name: Calcium Peroxide

Marine pollutant: No

Poison inhalation hazard: No

ICAO/IATA

Oxidizers are prohibited from aircraft.

IMDG

UN number: 3377 Class:5.1 Packing group:

II Proper shipping name: Calcium Peroxide

Marine pollutant: No

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15. Regulatory Information

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive hazard	No

SARA Section	Yes
SARA (313) Chemicals	No
EPA TSCA Inventory	Appears
Canadian WHMIS Classification	C, D2B
Canadian DSL	Appears
EINECS Inventory	Appears

16. Other Information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute Toxicity
Eye Dam.	Serious eye damage
H272	May intensify fire; oxidizer.
H314	May cause severe skin burns and eye damage
H302	Harmful if swallowed
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
Ox. Sol	Oxidizing solids.
STOT SE	Specific target organ toxicity-single exposure

HMIS Rating

Health hazard:	2
Chronic Health Hazard:	*
Flammability:	0
Physical Hazard:	1

NFPA Rating

Health hazard:	2
Fire Hazard:	0
Reactivity Hazard:	1
Special hazard.I:	OX

Disclaimer: The data in this Safety Data Sheet is believed to be correct. However, since conditions of use are outside our control it should not be taken as a warranty of representation. This information is provided solely for your consideration, investigation and verification.

Revised 19 April 2017