

MATERIAL SAFETY DATA SHEET

Calcium Peroxide

Section 01 - Chemical And Product And Company Information

Product Identifier Calcium Peroxide

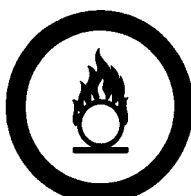
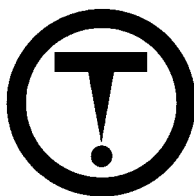
Product Use Used as a curing agent in rubber; starch modification; dough conditioner; industrial oxidizer; ingredient in deoderizers, cosmetics, and dentifrices.

Supplier Name..... ClearTech Industries Inc.
2303 Hanselman Avenue
Saskatoon SK S7I 5Z3
Canada

Prepared By..... ClearTech Industries Inc. Technical Department
Phone: (306)664-2522

Preparation Date..... 05/21/05

24-Hour Emergency Phone..... 306-664-2522



Section 02 - Composition / Information on Ingredients

Hazardous Ingredients	Calcium Peroxide	75% (w/w)
	Calcium Hydroxide	25% (w/w)
CAS Number	Calcium Peroxide	1305-79-9
	Calcium Hydroxide	1305-62-0
Synonym (s)	Calcium Superoxide; Solid peroxygen	

Section 03 - Hazard Identification

Inhalation..... Irritant. No significant long term inhalation hazard. Irritation usually subsides after exposure ceases.

Skin Contact / Absorption..... Skin irritant.

Eye Contact..... Airborne dust may be irritating

Ingestion..... If ingested, gastrointestinal irritation but not caustic burns are to be expected.

Exposure Limits..... No established limits for calcium peroxide. Limits for calcium hydroxide are below:

OSHA PEL-TWA = 5 mg/m³

ACGIH TLV-TWA = 5 mg/m³

Section 04 - First Aid Measures

Inhalation..... Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.

Skin Contact / Absorption..... Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists

Eye Contact..... Flush immediately with water for at least 20 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention

Ingestion..... Do not induce vomiting. Dilute by giving one or two glasses of water. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.

Additional Information..... Notes to Physician: Modest irritation is only expected effect and should have no serious consequences except in the case of direct eye contact. If ingested, gastrointestinal irritation but not caustic burns are to be expected. If large quantities are ingested, gastric evacuation via emesis or lavage may be used. Demulcents should be helpful. No systemic effects are expected.

Section 05 - Fire Fighting

Conditions of Flammability..... Non-flammable

Means of Extinction..... Product does not burn. Use any appropriate fire fighting agent for surrounding material. Use flooding quantities of water and water spray to cool containers.

Flash Point..... Not applicable

Auto-ignition Temperature..... Not applicable

Upper Flammable Limit Not applicable

Lower Flammable Limit..... Not applicable

Hazardous Combustible Products. Under fire conditions, product may decompose and release oxygen gas that supports combustion.

Special Fire Fighting Procedures... Wear NIOSH-approved self-contained breathing Apparatus and protective clothing.

Explosion Hazards..... Oxidizable materials can be ignited by grinding and may become explosive. Mixtures with polysulphide polymers may ignite.

Section 06 - Accidental Release Measures

Leak / Spill..... Wear appropriate personal protective equipment. Confine spill and place into container. Dilute with a large quantity of water prior to disposal. Do not return product to original container. Flush area with water. Prevent runoff to sewer or waterways as it may present a fire hazard.

Deactivating Materials..... Water

Section 07 - Handling and Storage

Handling Procedures..... Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

Storage Requirements..... Store in a cool, dry, well-ventilated place. Keep container tightly closed, and away from incompatible materials and sources of heat.

Section 08 - Personal Protection and Exposure Controls

Protective Equipment

Eyes..... Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.

Respiratory..... NIOSH-approved respirator for dust should be worn if needed.

Gloves..... Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing with soap and water, dry thoroughly before reuse.

- Clothing**..... Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing with soap and water, dry thoroughly before reuse.
- Footwear**..... Impervious boots of chemically resistant material should be worn at all times
- Other**..... No other information available

Engineering Controls

- Ventilation Requirements**..... Mechanical ventilation (dilution or local exhaust), process or personnel enclosure, and control of process conditions. Supply sufficient replacement air to make up for air removed by exhaust systems.
- Other**..... Emergency shower and eyewash should be in close proximity.

Section 09 - Physical and Chemical Properties

- Physical State**..... Solid
- Odor and Appearance**..... White to yellow odourless powder
- Odor Threshold**..... Not applicable
- Specific Gravity (Water=1)**..... 2.92
- Vapor Pressure (mm Hg, 20C)**..... Not applicable
- Vapor Density (Air=1)**..... Data not available
- Evaporation Rate**..... Not applicable
- Boiling Point**..... Not applicable
- Freeze/Melting Point**..... 275°C decomposes
- pH**..... 12-13 for a 1% solution
- Water/Oil Distribution Coefficient**... Data not available
- Bulk Density**..... 27 lb/ft³
- % Volatiles by Volume**..... 0
- Solubility in Water**..... Insoluble
- Molecular Formula**..... CaO₂

Molecular Weight..... Not applicable. Mixture.

Section 10 - Stability and Reactivity

Stability..... Stable under normal conditions. Decomposition could occur when exposed to heat or moisture

Incompatibility..... Incompatible with heat, heavy metals, organics, reducing agents, polysulphide polymers.

Hazardous Products of Decomposition Decomposition products include oxygen that supports combustion.

Polymerization..... Will not occur.

Section 11 - Toxicological Information

Irritancy..... Mild irritant (especially to eyes)

Sensitization..... Data not available

Chronic/Acute Effects..... None

Synergistic Materials..... Data not available

Animal Toxicity Data..... LD₅₀(oral, rat) > 5 g/kg [FMC I88-1052]
LD₅₀(dermal, rat) > 10 g/kg [FMC ICG/T-79.026]
LC₅₀(inhalation, rat, 1 hour) > 17 mg/L [FMC ICG/T-79.026]
Skin effects(rabbit) = non-irritating [FMC I88-1054]
Eye effects(rabbit) = severely irritating to unwashed eyes;
minimally irritating to washed eyes [FMC I88-1053]

Carcinogenicity..... Not considered to be carcinogenic as per ACGIH, OSHA, NTP, and IARC

Reproductive Toxicity..... Data not available

Teratogenicity..... Data not available

Mutagenicity..... Data not available

Section 12 - Ecological Information

Fish Toxicity..... Data not available

Biodegradability..... Data not available

Environmental Effects..... As previously indicated, oxygen is released into environment when product is dissolved in water. Effect of low concentrations of aquatic life is not determined.

Section 13 - Disposal Considerations

Waste Disposal..... Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 - Transportation Information

TDG Classification

Class..... 5.1

Group..... II

PIN Number..... UN 1457

Other..... Secure containers (full and/or empty) with suitable hold down devices during shipment.

Section 15 - Regulatory Information

WHMIS Classification..... C, D2B

NOTE: THE PRODUCT LISTED ON THIS MSDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS MSDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS

Section 16 - Other Information

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.