

# Calcium Thioglycollate MSDS

## 1. Product Name and Identification

- **Product Name:** [Calcium Thioglycollate](#)
- **Synonyms:** Calcium mercaptoacetate, Calcium dithioglycollate
- **CAS Number:** 814-71-1
- **Chemical Formula:**  $C_4H_6CaO_4S_2$
- **Recommended Use:** Depilatory agent in cosmetics, chemical intermediate.
- **Company Identification:** [Enter Supplier Name and Contact Information Here]

## 2. Composition/Ingredients

- **Component Name:** Calcium Thioglycollate
- **CAS Number:** 814-71-1
- **Concentration:** Typically supplied as a trihydrate, >95%.

## 3. Hazards Identification

**Emergency Overview:** This product is a white or pale pink crystalline powder with a faint, unpleasant sulfurous odor. It is harmful if swallowed. Causes skin irritation and serious eye irritation. May cause an allergic skin reaction. Contact with acids liberates toxic gas (hydrogen sulfide).

### Potential Health Effects:

- **Eye Contact:** Causes serious eye irritation. Direct contact can lead to significant redness, pain, and potential damage to the cornea.
- **Skin Contact:** Causes skin irritation. May cause redness, itching, and discomfort. Can be a skin sensitizer, leading to an allergic reaction upon repeated exposure.
- **Inhalation:** Inhalation of dust may irritate the nose, throat, and respiratory system. The characteristic odor may be unpleasant.
- **Ingestion:** Harmful if swallowed. Ingestion can cause irritation to the gastrointestinal tract, leading to symptoms like nausea, vomiting, and abdominal pain.

## 4. First Aid Measures

- **Eye Contact:** Immediately flush eyes with a steady stream of clean water for at least 15 minutes, holding the eyelids open to ensure all surfaces are rinsed. Remove contact lenses if present and easy to do. Seek immediate medical attention.

- **Skin Contact:** Immediately remove contaminated clothing. Wash the affected skin area thoroughly with soap and water. If irritation or an allergic reaction (rash, hives) develops, get medical advice.
- **Inhalation:** Move the exposed individual to fresh air. If breathing is difficult or discomfort persists, seek medical assistance.
- **Ingestion:** Call a poison control center or doctor immediately for treatment advice. Rinse the mouth with water. Do not induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person.

## 5. Handling and Storage

- **Handling:** Avoid creating and inhaling dust. Avoid all contact with eyes, skin, and clothing. Use in a well-ventilated area. Wear appropriate personal protective equipment (see Section 8). Wash hands and exposed skin thoroughly after handling.
- **Storage:** Store in a cool, dry, well-ventilated location away from direct sunlight and heat. Keep containers tightly sealed to prevent degradation. Store separately from strong acids, oxidizing agents, and bases.

## 6. Exposure Controls/Personal Protection

- **Engineering Controls:** Use local exhaust ventilation to control dust levels. An emergency eyewash station and safety shower should be available in the immediate work area.
- **Personal Protective Equipment (PPE):**
  - **Eye/Face Protection:** Wear chemical splash goggles to prevent eye contact.
  - **Skin Protection:** Wear chemical-resistant gloves (such as nitrile or neoprene) and protective clothing to prevent skin exposure.
  - **Respiratory Protection:** If engineering controls are not sufficient to control dust, use a NIOSH-approved particulate respirator (e.g., N95).
  - **General Hygiene:** Do not eat, drink, or smoke in the work area. Always wash hands before breaks and at the end of the shift.

## 7. Physical and Chemical Properties

- **Appearance:** White to pale pink crystalline powder
- **Odor:** Faint sulfurous (rotten egg-like) odor
- **pH:** 11 - 12.5 (saturated solution)
- **Melting Point:** Decomposes
- **Boiling Point:** Not applicable
- **Flash Point:** Not applicable
- **Solubility in Water:** Sparingly soluble
- **Molecular Weight:** 214.28 g/mol

## 8. Stability and Reactivity

- **Chemical Stability:** Stable under recommended storage conditions. Sensitive to air and light.
- **Conditions to Avoid:** Exposure to air, light, moisture, and high temperatures.
- **Incompatible Materials:** Strong acids (liberates toxic hydrogen sulfide gas), strong oxidizing agents, and strong bases.
- **Hazardous Decomposition Products:** Thermal decomposition can produce toxic fumes, including oxides of sulfur, carbon, and calcium.
- **Hazardous Polymerization:** Will not occur.

## 9. Toxicological Information

- **Acute Toxicity:**
  - **Oral (LD50, Rat):** Estimated to be in the range of 300 - 2000 mg/kg. Harmful if swallowed.
- **Carcinogenicity:** This product is not listed as a carcinogen by IARC, NTP, or OSHA.
- **Irritation:** Causes skin irritation and serious eye irritation.
- **Sensitization:** May cause an allergic skin reaction.

## 10. Disposal Considerations

- **Waste Disposal:** This material may be considered a hazardous waste. Disposal must be handled by a licensed professional waste disposal company in full compliance with all federal, state, and local regulations. Do not discharge into drains, sewer systems, or water bodies. The user of this product has the responsibility to determine the proper waste classification and disposal methods at the time of disposal.