

SAFETY DATA SHEET

1. IDENTIFICATION:

Product name:	Calcium Thioglycolate Trihydrate99%
Product code:	CATG99%
Company:	GuangZhou ShouYi Research New Materials CO.,LTD.
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Revision number:	1

Use: Manufacture of fine chemicals.
 Use in closed batch process (synthesis or formulation).
 Formulation [mixing] of preparations and/ or re-packaging (excluding alloys) .Use in closed batch process (synthesis or formulation).
 Mixing or blending in batch processes for formulation of preparations and articles (multistage and/ or significant contact) .
 Consumer uses: Private households (= general public = consumers) Cosmetics, personal care products .

2. HAZARDS IDENTIFICATION

Classification of the substance or mixturephysical

HAZARDS Corrosive to metals	Category 1
Acute toxicity (Oral)	Category 4
Skin sensitization	Category 1A
Acute aquatic hazard	Category 3

Symbols:



Signal word



Warning

Hazard statements

Harmful if swallowed.
 May cause an allergic skin reaction.
 Causes serious eye irritation.
 May cause respiratory irritation.
 May be corrosive to metals.

Precautionary statements

Keep only in original container.
 Avoid breathing dust/fume/gas/mist/vapours/spray.or spray.
 Do not eat, drink or smoke when using this product.
 Wear personal protective gloves/protective clothing/eye protection/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/ mixture:	Substance
Chemical Formula:	C ₄ H ₆ CaO ₄ S ₂
Components:	Calcium Thioglycolate Trihydrate 99%
Percent :	99%
CAS RN:	814-71-1

4. FIRST AID MEASURES

General advice: Take off contaminated clothing and shoes immediately.

Inhalation: Move to fresh air. Give oxygen. If symptoms persist, call a physician.

Skin contact: Wash off immediately with plenty of water.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Rinse mouth with water. If conscious, give the victim plenty of water to drink. In the case of spontaneous vomiting, hold person's head low to prevent inhalation into the wind-pipe. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Lung: irritation causing coughing

Asthmatic appearance

Eyes: Depending on the concentration conjunctivitis to severe chemical burn of the cornea/necrosis, iritis.

Skin

May cause sensitisation by skin contact.

Skin: Irritation up to severe chemical burn

Ingestion: Depending on the concentration irritation to severe chemical burn of the affected esophageal, gastric and intestinal mucosa (risk of perforation!), cardiac reaction, respiratory distress, acid-base balance disorders, cramps.

Indication of any immediate medical attention and special treatment needed

Irritated areas of skin can be treated with corticosteroids.

Inhaled glucocorticoids, bronchodilators with bronchospasms, are useful even after inhalation.

Provided there are no signs of esophageal and gastric perforation, an immediate gastric lavage using a large-bore gastric probe is useful (leave probe until at the hospital). Subsequent administration of charcoal powder useful.

Anti-aspiration prophylaxis possible through early intubation. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Water

Foam

Carbon dioxide (CO₂)

Specific hazards arising from the substance or mixture:

Hazardous decomposition products formed under fire conditions.

Carbon monoxide

Sulphur oxides

Carbon dioxide (CO₂)

Advice for firefighters:

Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Additional advice

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Exposure controls

Do not breathe dust.

Avoid contact with the skin and the eyes.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

Keep people away from and upwind of spill/leak.

For personal protection see section 8.

Environmental precautions

Must not get into the soil, sewerage systems and surface water. In the event of contamination,

notify the responsible authorities.

Methods and materials for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

Treat recovered material as described in the section "Disposal considerations".

7. HANDLING AND STORAGE**Precautions for safe handling****Advice on safe handling:**

Use only in area provided with appropriate exhaust ventilation.
Avoid formation of dust and aerosols. Do not breathe vapours/dust.
Handle and open container with care. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. Ensure that eye flushing systems and safety showers are located close to the working place. Exposure controls .

Advice on protection against fire and explosion:

Keep away from heat and sources of ignition.
Use only in area provided with appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities**Requirements for storage areas and containers:**

Store at room temperature in the original container.
Keep in a dry place.

Containers of polyethylene, polypropylene, stove-enamelled steel.

Further information on storage conditions: Store in accordance with the particular national regulations.

Advice on common storage: Do not store near acids.Keep away from oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Controls parameters

CAS No.	Identification	value	Basis	Note
814-71-1	calcium sulphidoacetate		TRGS900	Not listed

Exposure controls

Engineering measures

Application in a closed system.

Environmental exposure controls

General advice:Must not get into the soil, sewerage systems and surface water. In the event of contamination, notify the responsible authorities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Solid

Colour: White

Odour: sulfidic

pH: 11.0-12.0 at 20C

Metal corrosivity: >6.25mm/a Corrosive to metals

Melting point/range: 264 °C

Boiling point/boiling range: 196 °C Method: Calculation method

Vapour pressure Note: not applicable

Density: ca.0,85 g/cm³

Water solubility: 54 g/l at 20 °C

10. STABILITY AND REACTIVITY

Reactivity

Chemical stability

Hazardous reactions

Incompatible materials to avoid

Incompatible with oxidizing agents.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicokinetics, metabolism and distribution

Sensitisation: May cause sensitization by skin contact

Acute effects

Acute oral toxicity: LD50: 352 mg/kg
Species: rat
Method: No information available.

Acute inhalation toxicity: LC50: > 2.729 mg/m³
Exposure time: 4 h
Species: rat
Method: OECD Test Guideline 403

Acute dermal toxicity: LD50: > 2.000 mg/kg
Species: rat
Method: OECD 402

12. ECOLOGICAL INFORMATION**Toxicity**

Toxicity to fish: LC50 (48 h): 880 mg/l
Species: Leuciscus idus
Method: DIN 38412 / 15
Test substance: thioglycolic acid

LC50 (96 h): 30 mg/l
Species: Pimephales promelas
Test substance: thioglycolic acid

Toxicity to daphnia: EC50 (48 h): 38 mg/l
Species: Daphnia magna
Method: 92/69/EEC C.2
Test substance: thioglycolic acid 99%

Toxicity to algae: EC50 (72 h): 13 mg/l
Species: Pseudokirchneriella subcapitata
Method: OECD 201
Test substance: thioglycolic acid 99%

Persistence and degradability**Ecotoxicology Assessment****Further information on ecology**

Biodegradability: Result: Readily biodegradable. (100%/14d)
Method: OECD 301C
Test substance: thioglycolic acid

Result: biodegradable (21% /28 d)
Method: OECD 301A
Test substance: thioglycolic acid 99%

Result: Not readily biodegradable. (70% /28d)

Method: OECD 301D

Test substance: thioglycolic acid

Note: The 10 day time window criterion is not fulfilled.

Bioaccumulative potential:

Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues / unused products

Can be incinerated, when in compliance with local regulations.

Avoid release to the environment.

This material and its container must be disposed of as hazardous waste.

Disposal of contaminated packaging

This material and its container must be disposed of as hazardous waste.

Suitable cleaning agents

Water.

Waste Code

16 05 08 : discarded organic chemicals consisting of or containing dangerous substances.

Additional advice

The allocation of waste key numbers must be conducted according to specific industrial sectors and processes.

Above-mentioned waste code number is valid for the unused product.

Obtain approval of the relevant authorities before discharging into a sewage treatment plant.

14. TRANSPORT INFORMATION

Hazards Class:	8: Corrosive.
Subsidiary risk:	6. 1 : Toxic substance.
UN-No:	3263
Proper shipping name:	Corrosive solid basic, toxic, n.o.s.
Packing group:	III

15. REGULATORY INFORMATION

Regulations on the Safety Management of Hazardous Chemicals (issued by the State Council on January 26, 2002 and revised on February 16, 2011):It specifies the safe use, production, storage, transportation, loading and unloading of hazardous chemicals.

16. OTHER INFORMATION

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This SDS is prepared in good faith based on the information available to us, but no guarantee is provided for the data contained and the hazard and toxicity assessment. Before use, please first investigate the hazard and toxicity information of the product, as well as the laws and regulations of the organization, region and country using the product. Considering the safety, the product should be used immediately after purchase. Some new information or revisions may be added later. If the use time of the product is far longer than the expected use time or you have any questions, please feel free to contact us. The precautions mentioned are only for normal handling. In the case of special treatment, in addition to taking appropriate safety measures, full attention should also be paid. All chemical products should be treated in a way that "has unknown hazards and toxicity", which depends on the conditions and treatment methods at the time of use and/or storage conditions and duration. The product must be operated by personnel familiar with professional knowledge and experience, or guided by these experts during the whole use process from opening to storage and disposal. The conditions for safe use should be set by each user.