



L-Ergothioneine

Material Safety Data Sheet

Version No.	Revision Date
01	Jan. 1 st , 2024

SECTION 1: Identification of The Substance/Mixture And of The Company

1.1 Product Identifiers

Product name: L-Ergothioneine

CAS-No.: 497-30-3

1.2 Details of The Supplier of The Safety Data Sheet

Manufacturer: SHANGHAI EGT SYNBIO GROUP CO., LTD.

Address: No.1299, Ziyue Road, Minhang District, Shanghai, China

Post code: 200241

Telephone: 021-60410349

1.3 Relevant Identified Uses of The Substance or Mixture

Identified uses: Various uses that have been identified. Not for pharmaceutical use.

SECTION 2: Hazards Identification

Summary of Emergency

White if breathed in, move person into fresh air. If not breathing, give artificial respiration. Wash off with soap and plenty of water. Flush eyes with water as a precaution. Never give anything by mouth to an unconscious person. Rinse mouth with water.

2.1 GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

2.2 GHS Label Elements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

2.3 Physical And Chemical Hazards

Referring to current information, no physical or chemical hazard.

2.4 Health Hazards

Referring to current information, no health hazard.

2.5 Environmental Hazards

Referring to current information, no environmental hazard.

2.6 Other Hazards - none

SECTION 3: Composition/Information on Ingredients

Substance/Mixture: Substance

3.1 Substances

Synonyms: (S)-[1-carboxy-2-(2-mercaptoimidazol-4-yl)ethyl]trimethylammonium hydroxide; 2-MERCAPTOHISTIDINE BETAINE

Formula: C₉H₁₅N₃O₂S

Molecular weight: 229.30



CAS-No.: 497-30-3

EC-No.: 207-843-5

No components need to be disclosed according to the applicable regulations.

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most Important Symptoms And Effects, Both Acute And Delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of Any Immediate Medical Attention And Special Treatment Needed

No data available

4.4 Notes to Physician

No data available

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special Hazards Arising From The Substance or Mixture

Carbon oxides, Nitrogen oxides (NO_x), Sulphur oxides

5.3 Advice for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment And Emergency Procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

6.2 Environmental Precautions

Do not let product enter drains.

6.3 Methods And Materials for Containment And Cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to Other Sections

For disposal see section 13.

SECTION 7: Handling And Storage

7.1 Precautions for Safe Handling

Advice on Protection Against Fire And Explosion

Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene Measures

General industrial hygiene practice.

7.2 Conditions for Safe Storage

Storage Conditions



Store in a cool, dry place at room temperature in a sealed container, away from sunlight and moisture.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Ingredients with Workplace Control Parameters

We are not aware of any national exposure limit.

8.2 Exposure Controls

Appropriate Engineering Controls

General industrial hygiene practice.

Personal Protective Equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure

Do not let product enter drains.

SECTION 9: Physical And Chemical Properties

9.1 Information on Basic Physical And Chemical Properties

A) Appearance	White crystal
B) Odor	Characteristic odor
C) Odor Threshold	No data available
D) pH	6.0-7.5
E) Melting point (Decompose)	270-271°C
F) Initial boiling point and boiling range	No data available
G) Flash point	No data available
H) Evaporation rate	No data available
I) Flammability (solid, gas)	No data available



J)	Upper/lower flammability or explosive limits	No data available
K)	Vapour pressure	No data available
L)	Vapour density	No data available
M)	Relative density	No data available
N)	Water solubility	No data available
O)	Partition coefficient (n-octanol/water)	No data available
P)	Auto-ignition temperature	No data available
Q)	Decomposition temperature	No data available
R)	Viscosity(kinematic/dynamic)	No data available
S)	Explosive properties	No data available
T)	Oxidizing properties	No data available

9.2 Other Safety Information

No data available

SECTION 10: Stability And Reactivity

10.1 Chemical Stability

Stable under recommended storage conditions.

10.2 Possibility of Hazardous Reactions

No data available

10.3 Conditions to Avoid

Avoid light, heat, and high humidity.

10.4 Incompatible Materials

Strong oxidizing agents.

10.5 Hazardous Decomposition Products

In the event of fire: see Section 5.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity

Oral: ≥ 1600 mg/kg mouse

Inhalation: no harm of severe acute poisoning

Dermal: no harm of severe acute poisoning

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

At a concentration of 5000 μ g/mL, no mutations were found in the chromosomal aberration test of CHL cells.

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure



No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological Information

12.1 Toxicity

No data available

12.2 Persistence and Degradability

No data available

12.3 Bioaccumulative Potential

No data available

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB Assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other Adverse Effects

No data available

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport Information

14.1 UN Number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

14.3 Transport Hazard Classes

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging Group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental Hazards

ADR/RID: No

IMDG: No

IATA: No

14.6 Special Precautions for User

No data available

14.7 Incompatible Materials

Strong oxidizing agents.

Further Information



Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory Information

15.1 Safety, Health And Environmental Regulations/Legislation Specific for The Substance or Mixture

National Regulatory Information

Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the MSDS as well as the local/national regulations concerning the chemical.

Other Regulations

Please pay attention on the waste treatment should also comply with local regulations requirement.

SECTION 16: Other Information

Copyright: SHANGHAI EGT SYNBIO GROUP CO., LTD.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions.

