

Reanal Private Ltd.

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1. Identification of the substance and the company

1.1. Identification of the substance

Product name: **L-Cystine**
Synonyms: **3,3'-Dithiobis(2-aminopropionic acid)**
REACH-No: **N/A**
Exempted from registration. Produced volume is less than 1 t/year.
((EC)1907/2006 (REACH) 6. Art. (1))
CAS-No: **56-89-3**
EU-No: **200-296-3**
REANAL Product Number: **18610**

1.2. Application of the substance

Onto industrial and laboratory aim.

1.3. Identification of the company

Company identification: **Reanal Private Ltd.**
Address: HUNGARY, H-1147 Budapest, Telepes u. 53.
Telephone (during working hours): (36-1) 467-7500 Fax.: (36-1) 252-1339
E-mail: QA@reanal.hu

2. Hazard statements

2.1. Hazard symbols and-signs:

Substance non classified as hazardous according to Directive 1272/2008/EC (REACH).

2.2. GHS hazard symbols and-signs:

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GHS sentences

Prevention precautionary statements:

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P285 In case of inadequate ventilation wear respiratory protection
P273 Avoid release to the environment

3. Composition / Information on ingredients

Molecular formula: $C_6H_{12}N_2O_4S_2$ CAS No.: 56-89-3
Relative molecular weight: 240.30 EU No.: 200-296-3

4. First aid measures

General: Remove exposed person from the contaminated area immediately, if necessary make lay him/her comfortable and loosen tight clothing. Cover up injured person, do not allow to cool. Remove contaminated clothing and shoes immediately. Wash contaminated clothing before reuse. If necessary, call a physician. After swallowing: If swallowed, wash out mouth with water provided person is conscious. After inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration. After eye contact: In case of contact immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. After skin contact: In case of skin contact, immediately wash off skin with soap and copious amounts of water.

5. Fire fighting measures

Not flammable. Use water spray, carbon dioxide, dry chemical powder, alcohol or polymer foam extinguisher. Use water spray to cool containers under fire conditions. Use extinguishing media appropriate to surrounding fire conditions. Emits toxic fumes under fire conditions.

6. Accidental release measures

Close contaminated area. Wear self-contaminated breathing apparatus, rubber boots and heavy rubber gloves according to degree of contamination. Do not allow contamination to get to drain. Sweep up, place in container and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7. Handling and storage

Use only in a chemical fume hood. Store in labelled container. Store in a cool dry place. Light sensitive. Air sensitive.

Storage temperature: 15-25 °C

8. Exposure controls / Personal protection

Exposure controls:

Avoid contact with eyes, skin and clothing. Do not breathe dust. Protective clothing should be selected specifically for the working place, depending on concentrations and quantity of the hazards. Use only in a chemical fume hood. Mechanical exhaust required. Safety shower and eye bath are required. When working do not eat or smoke. Wash thoroughly after handling. Take care of bathing facilities with warm water after work.

Personal protective equipment:

Protective clothing.

Eye protection:

Chemical safety goggles.

Hand protection:

Chemical-resistant rubber gloves.

Respiration protection:

Specific control parameters

MAK (mg/m³): **N/A**

9. Physical and chemical properties

Appearance:	White to off-white powder
Form:	Solid
Colour:	White
Odour:	Odorless
Boiling point [°C]:	Not determined
Melting point [°C]:	>240
Solubility in water [°C]:	Insoluble
Bulk density [kg/m ³]:	Not determined
Viscosity (dynamic, 20°C) [mPa*s]:	Not determined
Flash point [°C]:	N/A
Ignition temperature [°C]:	N/A
Explosion limits [V/V%]:	N/A
Optical rotation ($\alpha_{20/D}$):	-219 (c=2, 1M HCl)

10. Stability and reactivity

Incompatibilities:

Strong oxidizing agents, metals, light and air.

Decomposition products:

Carbon monoxide, carbon dioxide, sulfur and nitrogen oxides.

Hazardous reactions:

No dangerous reactions known.

11. Toxicological information

Acute toxicity:

May be harmful by inhalation, ingestion or skin absorption. Causes eyes and skin irritation. Material is irritating to mucous membranes and upper respiratory tract.

Irritation data:

No information available.

Toxicity data:

IPR - MUS LD₅₀: >961 mg/kg

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12. Ecological information

WGK (German Water Hazard Classification): 1

Do not allow undiluted product or large quantities of it to ground water, water bodies or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

Futher ecological data:

No information available.

13. Disposal information

Consult state, local or national regulations for proper disposal.

Disposal must be made according to official regulation. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Chemicals must be disposed of in compliance with the respective national regulations.

14. Transport information

ADR/RID: , PG ,

IMDG: N/A

Ems: N/A

MFAG: N/A

IATA: N/A

CAO: N/A

PAX: N/A

15. Regulatory information

Safety phrases:

22 Do not breathe dust.

24/25 Avoid contact with skin and eyes.

Labelling according to EC Directives.

16. Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Reanal shall not be held liable for any damage resulting from handling or from contact.