1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: L-Cysteine
Product code: GM3760
CAS number: 52-90-4
EINECS: 200-158-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

PC21: Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company name: Glentham Life Sciences Ltd
Telephone: +44 (0) 1225 667 798
Fax: +44 (0) 2033 978 909
Edinburgh Way
Corsham
Wiltshire, SN13 9XN
Email: info@glentham.com
Web: www.glentham.com

1.4 Emergency telephone number

Emergency telephone number: +44 (0) 1225 667 798 (09.00 - 17.00 GMT)

1.5 REACH

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification under CLP
Acute Oral Tox. 4.

2.2 Label elements

Label elements under CLP
Pictograms

- Signal words
  - Warning
- Hazard statements
  - H302 Harmful if swallowed.
- Precautionary statements
  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

2.3 Other hazards

PBT
This substance is not identified as a PBT substance.

3.0 Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>EINECS</th>
<th>MW</th>
<th>MF</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-Cysteine</td>
<td>52-90-4</td>
<td>200-158-2</td>
<td>121.16</td>
<td>C3H7NO2S</td>
</tr>
</tbody>
</table>

4.0 First aid measures

4.1 Description of first aid measures

Skin contact
Wash immediately with plenty of soap and water.

Eye contact
Bathe the eye with running water for 15 minutes.

Ingestion
Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible.
4.2 Most important symptoms and effects, both acute and delayed

**Skin contact**
There may be mild irritation at the site of contact.

**Eye contact**
There may be pain and redness.

**Ingestion**
There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation**
Absorption through the lungs can occur causing symptoms similar to those of ingestion.

**Immediate effects**
Immediate effects can be expected after short-term exposure.

**Delayed / immediate effects**
Immediate effects can be expected after short-term exposure.

4.3 Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment**
Not applicable.

5.0 Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media for the surrounding fire should be used.

5.2 Special hazards arising from the substance or mixture

**Exposure hazards**
In combustion emits toxic fumes.

5.3 Advice for fire-fighters
Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6.0 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

**Personal precautions**
Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not create dust.

6.2 Environmental precautions
Do not discharge into drains or rivers.

6.3 Methods and material for containment and cleaning up

**Clean-up procedures**
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.3 Reference to other sections
Refer to section 8 of SDS.

7.0 Handling and storage

7.1 Precautions for safe handling

**Handling requirements**
Ensure there is sufficient ventilation of the area. Avoid the formation or spread of dust in the air. Avoid direct contact with the substance.

7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Store in cool, well ventilated area. Keep container tightly closed. Avoid contact with water or humidity.

7.3 Specific end use(s)
No data available.

8.0 Exposure controls/personal protection

8.1 Control parameters

**Workplace exposure limits**
8.2 Exposure controls
   Engineering measures
   Ensure there is sufficient ventilation of the area.
   Respiratory protection
   Respiratory protective device with particle filter.
   Hand protection
   Protective gloves.
   Eye protection
   Safety glasses. Ensure eye bath is to hand.
   Skin protection
   Protective clothing.

9.0 Physical and chemical properties
9.1 Information on basic physical and chemical properties
   Physical Form: Powder
   Colour: White
9.2 Other information
   Not applicable.

10.0 Stability and reactivity
10.1 Reactivity
   Stable under recommended transport or storage conditions.
10.2 Chemical stability
   Stable under normal conditions.
10.3 Possibility of hazardous reactions
   Hazardous reactions
   Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.
10.4 Conditions to avoid
   Heat.
10.5 Incompatible materials
   Materials to avoid
   Strong acids. Strong oxidising agents.

11.0 Toxicological information
11.1 Information on toxicological effects
   Toxicity values
   Not applicable.
11.2 Information on toxicological effects
   Skin contact
   There may be mild irritation at the site of contact.
    Eye contact
   There may be pain and redness.
   Ingestion
   There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur. There may be vomiting.
   Inhalation
   Absorption through the lungs can occur causing symptoms similar to those of ingestion.
   Delayed / immediate effects
   Immediate effects can be expected after short-term exposure.
   Other information
12.0 Ecological information

12.1 Toxicity
Not applicable.

12.2 Persistence and degradability
Biodegradable.

12.3 Bioaccumulative potential
No bioaccumulation potential.

12.4 Mobility in soil
Readily absorbed into soil.

12.5 Results of PBT and vPvB assessment
This substance is not identified as a PBT substance.

12.6 Other adverse effects
Negligible ecotoxicity.

13.0 Disposal considerations

13.1 Waste treatment methods
Disposal operations
Transfer to a suitable container and arrange for collection by specialised disposal company.

NB
The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14.0 Transport information
This product does not require a classification for transport.

15.0 Regulatory information
Safety, health and environmental regulations/legislation specific for the substance or mixture
Not applicable.

Chemical Safety Assessment
A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

16.0 Other information
Other information
This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

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