

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.04.2022

Version number 3 (replaces version 2)

Revision: 07.04.2022

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Acetylthiocholine-iodide
- **Article number:** 10570
- **CAS Number:**  
1866-15-5
- **EC number:**  
217-474-1
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture:** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
SERVA Electrophoresis GmbH  
Carl-Benz-Str. 7  
D-69115 Heidelberg  
Tel.: +49 6221 13840-0  
FAX: +49 6221 13840-10  
msds.info@serva.de
- **Information department:** Product Safety department Tel.: +49 6221 13840-35
- **1.4 Emergency telephone number:**  
Medical Emergency Information in case of poisoning:  
Poison Information Center Mainz - Phone: +49 (0) 6131 19240  
(advisory service in German or English language)



### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008:**



GHS06

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008:**  
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms:** GHS06
- **Signal word:** Danger
- **Hazard statements:**  
H301+H311 Toxic if swallowed or in contact with skin.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.
- **Precautionary statements**  
P264 Wash thoroughly after handling.

(Contd. on page 2)

GB

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.04.2022

Version number 3 (replaces version 2)

Revision: 07.04.2022

**Trade name: Acetylthiocholine-iodide**

(Contd. of page 1)

- P280** Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P301+P310** IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
- P330** Rinse mouth.
- P302+P352** IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- **Labelling of packages where the contents do not exceed 125 ml**

- **Hazard pictograms** GHS06

- **Signal word** Danger

- **Hazard statements**

H301+H311 Toxic if swallowed or in contact with skin.

- **Precautionary statements**

**P280** Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**P301+P310** IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

**P302+P352** IF ON SKIN: Wash with plenty of soap and water.

**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment:**

- **PBT:** PBT - assessment not available.

- **vPvB:** vPvB - assessment not available.

\*

### SECTION 3: Composition/information on ingredients

- **3.1 Substances**

- **CAS No. Description:**

1866-15-5 2-acetylthioethyltrimethylammonium iodide

- **Identification number(s):**

- **EC number:** 217-474-1

- **Description:**

- **Empirical formula:**  $C_7H_{16}NIOS$

- **MW:** 289.2

\*

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information:**

Remove contaminated clothing.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

Immediate wash with copious amounts of water and soap; rinse thoroughly; seek medical advice.

- **After eye contact:**

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist immediately.

- **After swallowing:**

Wash out mouth. Call a doctor immediately.

Do not induce vomiting!

- **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.04.2022

Version number 3 (replaces version 2)

Revision: 07.04.2022

**Trade name: Acetylthiocholine-iodide**

(Contd. of page 2)

- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture:**  
In case of fire, the following can be formed, but not limited to:  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides (SO<sub>x</sub>)  
Carbon monoxide and carbon dioxide  
Hydrogen iodide (HI)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation  
Avoid contact with the eyes and skin.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up**  
Dispose contaminated material as waste according to item 13.  
Pick up mechanically.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store at +2 to +8 °C
- **Information about storage in one common storage facility:**  
Do not store together with strong oxidizing agents.
- **Further information about storage conditions:**  
Store under lock and key and with access restricted to technical experts or their assistants only.  
Keep receptacle tightly sealed and store in dry conditions.  
Protect from exposure to the light.  
This product is hygroscopic.  
Protect from humidity and water.
- **7.3 Specific end use(s):** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.04.2022

Version number 3 (replaces version 2)

Revision: 07.04.2022

**Trade name: Acetylthiocholine-iodide**

(Contd. of page 3)

- **8.2 Exposure controls**
- **Appropriate engineering controls:** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
Short term filter device:  
Filter P3.
- **Hand protection:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Protective gloves.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves:**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material:**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**  
Natural rubber, NR  
Chloroprene rubber, CR
- **Eye/face protection:** Safety glasses
- **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information:**
- **Physical state:** Solid.
- **Colour:** White
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** no information available
- **Boiling point or initial boiling point and boiling range:** no information available
- **Flammability:** no information available
- **Lower and upper explosion limit:**
- **Lower:** no information available
- **Upper:** no information available
- **Flash point:** no information available
- **Decomposition temperature:** no information available
- **pH:** no information available
- **Viscosity:**
- **Kinematic viscosity:** no information available
- **Dynamic viscosity:** no information available
- **Solubility:**
- **Water:** Soluble
- **Partition coefficient n-octanol/water (log value):** no information available

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.04.2022

Version number 3 (replaces version 2)

Revision: 07.04.2022

**Trade name: Acetylthiocholine-iodide**

(Contd. of page 4)

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>Vapour pressure:</b></li> <li>· <b>Density and/or relative density:</b></li> <li>· <b>Density:</b></li> <li>· <b>Relative density:</b></li> <li>· <b>Particle characteristics</b></li> </ul>                                       | <p>no information available</p> <p>no information available</p> <p>no information available</p> <p>No information available</p> |
| <ul style="list-style-type: none"> <li>· <b>9.2 Other information</b></li> <li>· <b>Appearance:</b></li> <li>· <b>Form:</b></li> <li>· <b>Important information on protection of health and environment, and on safety:</b></li> <li>· <b>Explosive properties:</b></li> </ul> | <p>There are no more data available.</p> <p>Powder</p> <p>Product does not present an explosion hazard.</p>                     |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No further relevant informations available.
- **10.4 Conditions to avoid:**
  - high temperatures
  - moisture
  - exposure to the light
- **10.5 Incompatible materials:**
  - Avoid contact with:
  - Strong acids
  - Strong oxidizers
- **10.6 Hazardous decomposition products:** In case of fire: See Section 5

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**
  - **Acute toxicity:** Toxic if swallowed or in contact with skin.
- | · <b>LD/LC50 values that are relevant for classification:</b> |      |                 |
|---|------|-----------------|
| Oral  | LD50 | 100 mg/kg (rat) |
- **Skin corrosion/irritation:** Causes skin irritation.
  - **Serious eye damage/irritation:** Causes serious eye irritation.
  - **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.
  - **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
  - **Carcinogenicity:** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity:** Based on available data, the classification criteria are not met.
  - **STOT-single exposure:** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
  - **Aspiration hazard:** Based on available data, the classification criteria are not met.
  - **11.2 Information on other hazards:**
  - **Endocrine disrupting properties:** Substance is not listed.

### SECTION 12: Ecological information

- **12.1 Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability:** No further relevant information available.
- **12.3 Bioaccumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.

(Contd. on page 6)

GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.04.2022

Version number 3 (replaces version 2)

Revision: 07.04.2022

**Trade name: Acetylthiocholine-iodide**


(Contd. of page 5)

- **12.5 Results of PBT and vPvB assessment:**
  - **PBT:** PBT - assessment not available.
  - **vPvB:** vPvB - assessment not available.
  - **12.6 Endocrine disrupting properties:** For information on endocrine disrupting properties see section 11.
  - **12.7 Other adverse effects:**
  - **Additional ecological information:**
  - **General notes:**
- Do not allow product to reach ground water, water course or sewage system.  
Water danger class 3 (German Regulation) (Assessment by list): extremely hazardous for water.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**
- Disposal must be made according to official regulations.  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
  - **Recommendation:**
- Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### SECTION 14: Transport information

- |   |   |
|---|---|
| · <b>14.1 UN number or ID number</b>  | UN2811  |
| · <b>ADR, IMDG, IATA</b>  |   |
| · <b>14.2 UN proper shipping name</b>   | 2811 TOXIC SOLID, ORGANIC, N.O.S. (2-acetylthioethyltrimethylammonium iodide) |
| · <b>ADR</b>  |   |
| · <b>IMDG, IATA</b>   | TOXIC SOLID, ORGANIC, N.O.S. (2-acetylthioethyltrimethylammonium iodide)      |
| · <b>14.3 Transport hazard class(es)</b>  |   |
| · <b>ADR, IMDG, IATA</b>  |   |
|  |   |
| · <b>Class:</b>   | 6.1 Toxic substances.   |
| · <b>Label:</b>   | 6.1   |
| · <b>14.4 Packing group</b>   | III   |
| · <b>ADR, IMDG, IATA</b>  |   |
| · <b>14.5 Environmental hazards</b>   |   |
| · <b>Marine pollutant:</b>  | No  |
| · <b>14.6 Special precautions for user</b>  | Warning: Toxic substances.  |
| · <b>Hazard identification number (Kemler code):</b>                                | 60  |
| · <b>EMS Number:</b>  | F-A,S-A   |
| · <b>Stowage Category</b>   | A   |
| · <b>14.7 Maritime transport in bulk according to IMO instruments</b>               | Not applicable.   |

(Contd. on page 7)



# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.04.2022

Version number 3 (replaces version 2)

Revision: 07.04.2022

**Trade name: Acetylthiocholine-iodide**

(Contd. of page 6)

**· Transport/Additional information:****· ADR****· Limited quantities (LQ)**

5 kg

**· Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

**· Transport category**

2

**· Tunnel restriction code**

E

**· IMDG****· Limited quantities (LQ)**

5 kg

**· Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

**· UN "Model Regulation":**

UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (2-ACETYLTHIOETHYLTRIMETHYLAMMONIUM IODIDE), 6.1, III

**SECTION 15: Regulatory information****· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****· Directive 2012/18/EU****· Named dangerous substances - ANNEX I** Substance is not listed.**· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

Substance is not listed.

**· REGULATION (EU) 2019/1148****· Annex I - RESTRICTED EXPLOSIVES PRECURSORS** (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

**· Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.**· Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.**· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

Substance is not listed.

**· National regulations:****· Technical instructions (air):**

Class	Share in %
I	80-100

**· Water hazard class:** Water danger class 3 (Assessment by list): extremely hazardous for water.**· 15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**· Department issuing SDS:** Product safety department**· Contact:** +49 6221 13840-35**· Date of previous version:** 14.08.2017**· Version number of previous version:** 2

(Contd. on page 8)

**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

Printing date 07.04.2022

Version number 3 (replaces version 2)

Revision: 07.04.2022

**Trade name: Acetylthiocholine-iodide**

(Contd. of page 7)

**· Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ICAO: International Civil Aviation Organisation*

*PBT: persistent, bioaccumulative, toxic substance (REACH)*

*vPvB: very persistent, very bioaccumulative substance (REACH)*

*REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals*

*CLP: Regulation on classification, labelling and packaging of substances and mixtures*

*bw: body weight*

*ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonised System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Acute Tox. 3: Acute toxicity – Category 3*

*Skin Irrit. 2: Skin corrosion/irritation – Category 2*

*Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*

GB