

SAFETY DATA SHEET

Revision Date 24-Dec-2021 Revision Number 4

1. Identification

Product Name S-Butyrylthiocholine iodide

Cat No.: AC108150000; AC108150050; AC108150250; AC108151000

CAS No 1866-16-6

Synonyms (2-Mercaptoethyl)trimethylammonium iodide butyrate

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/IrritationCategory 2Serious Eye Damage/Eye IrritationCategory 2Specific target organ toxicity (single exposure)Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation

May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|---|-----------|----------|
| Ethanaminium, | 1866-16-6 | >95 |
| N,N,N-trimethyl-2-[(1-oxobutyl)thio]-, iodide | | |

4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Get medical attention. Wash off immediately with plenty of water for at least 15 minutes.

Inhalation Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms and

effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen iodide.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2 | 1 | 1 | N/A |

6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust

formation.

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological

Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed **Up** containers for disposal.

| _ | | | |
|---|-------|---------|---------|
| / | Handi | una and | storage |

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage. Keep container tightly closed in a dry and well-ventilated place. Keep refrigerated. Store

under an inert atmosphere. Incompatible Materials. Strong oxidizing agents.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

S-Butyrylthiocholine iodide

Eye/face Protection Tight sealing safety goggles.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State Powder Solid Appearance White

OdorNo information availableOdor ThresholdNo information available

pH 4-6 50 g/l aq.sol

Melting Point/Range 172 - 176 °C / 341.6 - 348.8 °F

Boiling Point/Range No information available Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density Not applicable

Specific GravityNo information availableSolubilityNo information available

Partition coefficient; n-octanol/water

Autoignition Temperature

No data available
No information available

Autoignition Temperature

Decomposition Temperature

Viscosity

No information available
No information available
No applicable

Molecular Formula C9 H20 I N O S

Molecular Weight 317.22

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Hygroscopic. Light sensitive.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation. Exposure to light.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂), Hydrogen iodide

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous ReactionsNone under normal processing.

11. Toxicological information

Acute Toxicity

Product InformationNo acute toxicity information is available for this product

Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|-------------------------|-----------|------------|------------|------------|------------|------------|
| Ethanaminium, | 1866-16-6 | Not listed |
| N,N,N-trimethyl-2-[(1-o | | | | | | |
| xobutyl)thio]-, iodide | | | | | | |

Mutagenic Effects No information available

Reproductive Effects No information available.

No information available. **Developmental Effects**

Teratogenicity No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

No information available **Aspiration hazard**

Symptoms / effects, both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Will likely be mobile in the environment due to its water solubility. Mobility

13. Disposal considerations

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods**

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Transport information

Not regulated DOT TDG Not regulated Not regulated IATA IMDG/IMO Not regulated

15. Regulatory information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|-------------------------------------|-----------|------|---|--------------------------------|
| Ethanaminium, | 1866-16-6 | Χ | ACTIVE | - |
| N,N,N-trimethyl-2-[(1-oxobutyl)thio | | | | |

S-Butyrylthiocholine iodide

| 1 iodide | | |
|----------|--|--|

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|-------------------------------------|-----------|-----|------|-----------|-------|------|------|------|-------|------|
| Ethanaminium, | 1866-16-6 | Х | - | 217-475-7 | - | - | | - | - | - |
| N,N,N-trimethyl-2-[(1-oxobutyl)thio | | | | | | | | | | |
|]-, iodide | | | | | | | | | | |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component | CAS No | OECD HPV | Persistent Organic | Ozone Depletion | Restriction of |
|-----------|--------|----------|--------------------|-----------------|----------------|

N,N,N-trimethyl-2-[(1-oxobutyl)thio]-, iodide

| | | | Pollutant | Potential | Hazardous Substances (RoHS) |
|--|-----------|---|---|------------------|------------------------------------|
| Ethanaminium, N,N,N-trimethyl-2-[(1-oxobutyl)thio]-, iodide | 1866-16-6 | Not applicable | Not applicable | Not applicable | Not applicable |
| | | | | | |
| | | | | | |
| Component | CAS No | Seveso III Directive | Seveso III Directive | Rotterdam | Basel Convention |
| Component | CAS No | (2012/18/EC) - | (2012/18/EC) - | Convention (PIC) | Basel Convention (Hazardous Waste) |
| Component | CAS No | (2012/18/EC) - | | Convention (PIC) | |
| Component | CAS No | (2012/18/EC) - | (2012/18/EC) - | Convention (PIC) | |
| Component | CAS No | (2012/18/EC) - Qualifying Quantities | (2012/18/EC) - Qualifying Quantities | Convention (PIC) | |

16. Other information

Prepared By Regulatory Affairs

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 Print Date
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Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS