S-Butyrylthiocholine Iodide: sc-286740



MATERIAL SAFETY DATA SHEET

1 Identification of substance:

Product Name:	S-Butyrylthiocholine Iodide
Catalog Number:	sc-286740
Supplier:	Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800
Emergency:	ChemWatch Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2 Hazards identification

Classification of the substance or mixture



H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

Label elements

Labelling according to EU guidelines:

Code letter and hazard designation of product:

Xi Irritant

Risk phrases: 36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 37 Wear suitable gloves. Hazard description: WHMIS classification



Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



Health (acute effects) = 1
Flammability = 1
Reactivity = 1

Other hazards Results of PBT and vPvB assessment PBT: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances (CAS#) Description: S-Butyrylthiocholine iodide (CAS# 1866-16-6) Identification number(s): EINECS Number: 217-475-7

4 First aid measures

Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek immediate medical advice.

5 Firefighting measures

Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture In case of fire, the following can be released: Carbon monoxide and carbon dioxide Nitrogen oxides (NOX) Sulfur oxides (SOX) Hydrogen iodide (HI) Possibly Hydrogen cyanide (HCN) Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Environmental precautions:
Do not allow material to be released to the environment without proper governmental permits.
Methods and material for containment and cleaning up: Ensure adequate ventilation.
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.

7 Handling and storage

Handling Precautions for safe handling Keep container tightly sealed. Ensure good ventilation at the workplace. Information about protection against explosions and fires: Keep ignition sources away.

Conditions for safe storage, including any incompatibilities Storage Store at 4°C. Requirements to be met by storerooms and receptacles: Refrigerate Information about storage in one common storage facility: Store in the dark. Protect from heat. Store away from oxidizing agents. Store away from water/moisture. Further information about storage conditions: This product is hygroscopic. Keep container tightly sealed. Protect from humidity and water. Protect from exposure to light. Refrigerate

8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Control parameters

Components with limit values that require monitoring at the workplace: Not required. Additional information: No data

Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. Material of gloves The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical General Information Appearance:	properties
Form:	Crystalline powder
Formula:	C9H20INOS
Weight:	317.2
pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	172-176°C (342-349 °F)
Boiling point/Boiling range:	Not determined
Sublimation temperature / start:	Not determined
Flammability (solid, gaseous)	Not determined.
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Auto igniting:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure:	Not applicable.
Density:	Not determined
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with Water:	Soluble
Segregation coefficient (n-octonol/water):	

Not applicable. Not applicable. No further relevant information available.

10 Stability and reactivity

Reactivity Chemical stability Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions No dangerous reactions known Incompatible materials: Heat Water/moisture Light Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides Sulfur oxides (SOx) Hydrogen iodide (HI) Possibly Hydrogen cyanide (HCN)

11 Toxicological information

Information on toxicological effects
Acute toxicity:
Primary irritant effect:
on the skin: Irritant to skin and mucous membranes.
on the eye: Irritating effect.
Sensitization: No sensitizing effects known.
Subacute to chronic toxicity:
Prolonged exposure to iodides may cause skin rash, running nose, headache and irritation of
the mucous membranes. In severe cases the skin may show pimples, boils, redness, black and
blue spots, hives and blisters. Iodides are readily diffused across the placenta.
Additional toxicological information:
To the best of our knowledge the acute and chronic toxicity of this substance is not fully
known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information

Toxicity
Acquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Additional ecological information:
General notes:
Do not allow undiluted product or large quantities of it to reach ground water, water course
or sewage system.
Do not allow material to be released to the environment without proper governmental permits.
Results of PBT and vPvB assessment
PBT: Not applicable.
VPvB: Not applicable.
Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

Not a hazardous material for transportation.

DOT regulations: Hazard class: None	
Land transport ADR/RID ADR/RID class: None	(cross-border)
Maritime transport IMDG IMDG Class: None Marine pollutant: No	:e
Air transport ICAO-TI a ICAO/IATA Class: None	nd IATA-DGR:

Special precautions for user Not applicable.

Transport/Additional information: Not dangerous according to the above specifications. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture $% \left(\frac{1}{2} \right) = 0$

Product related hazard informations:

Hazard symbols:

Xi Irritant

Risk phrases:

36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

37 Wear suitable gloves.

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

Information about limitation of use: For use only by technically qualified individuals. **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

11/14/2013