

Safety Data Sheet

acc. to OSHA HCS

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1 Identification · Product identifier · Trade name: Taurohyocholic Acid (sodium salt) · Synonym $2-[[(3\alpha,5\beta,6\alpha,7\alpha)-3,6,7-trihydroxy-24-oxocholan-24-yl]amino]-ethanesulfonic acid, monosodium salt$ Taurohyocholate Tauro-y-muricholic Acid Taurine Hyocholate THCA · CAS Number: 117997-17-8 · Other means of identification · Article number: 22669 · Application of the substance / the mixture This product is for research use - Not for human or veterinary diagnostic or therapeutic use. · Details of the supplier of the safety data sheet Manufacturer/Supplier: Cayman Chemical Co. 1180 E. Ellsworth Rd. Ann Arbor, MI 48108 USA · Information department: Product safety department · Emergency telephone number: During normal opening times: +1 (734) 971-3335 US/CANADA: 800-424-9300 Outside US/CANADA: 703-741-5970 2 Hazard(s) identification · Classification of the substance or mixture The substance is not classified, according to the Globally Harmonized System (GHS). · Label elements · GHS label elements None · Hazard pictograms None · Signal word None · Hazard statements None Information pertaining to particular dangers for man and environment: · Classification system: • NFPA ratings (scale 0 - 4) Health = 0

Health = 0 Fire = 0 Reactivity = 0

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· HMIS-ratings (scale 0 - 4)



· Other hazards

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- vPvB: Not applicable.
- Classification according to (d)(1)(ii) of § 1910.12000

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

· Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 117997-17-8 Taurohyocholic Acid (sodium salt)

4 First-aid measures

- · Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:
- Use fire fighting measures that suit the environment.
- A solid water stream may be inefficient.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Pick up mechanically.

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Protective Action Criteria for Chemicals

- PAC-1: Substance is not listed.
- PAC-2: Substance is not listed.
- **PAC-3:** Substance is not listed.
- **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

- Precautions for safe handling No special measures required.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage: Store in accordance with information listed on the product insert.
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · 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.
- · Exposure controls
- Appropriate engineering controls No further data; see section 7.
- Personal protective equipment:
- General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- Breathing equipment: Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 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.

• Eye protection: Not required.

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Information on basic physical and chemic	al properties	
General Information		
Physical state	Solid	
Color:	Not determined.	
Odor:	Characteristic	
Structural Formula	C26H44NO7S • Na	
Molecular Weight	537.7 g/mol	
Storage Buffer		
Odor threshold:	Not determined.	
Formulation		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flammability:	Product is not flammable.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Flash point:	Not applicable.	
Decomposition temperature:	Not determined.	
pH-value:	Not applicable.	
Viscosity:		
Kinematic:	Not applicable.	
SOLUBILITY	DMF: 30 mg/ml; DMF:PBS(pH 7.2)(1:1): 0.5 mg/m	
	DMSO: 20 mg/ml;Ethanol: 20 mg/ml	
Dynamic:	Not applicable.	
Solubility in / Miscibility with		
Water:	Not determined.	
Partition coefficient (n-octanol/water):	Not determined.	
Vapor pressure:	Not applicable.	
Vapor pressure:		
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not applicable.	
Particle characteristics	Not determined.	
Other information		
Appearance:		
Form:	Lyophilized powder	
Important information on protection of hea		
and environment, and on safety.		
Ignition temperature:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Change in condition		

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

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- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
- The substance is not subject to classification.
- · Interactive effects No interactive effects between components are known.
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.
- Alternative sources for toxicological information
 No non-standard sources for toxicological information where used.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

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

13 Disposal considerations

- Waste treatment methods
- \cdot Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

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UN-Number DOT, IMDG, IATA	not regulated
	not regulated
UN proper shipping name DOT, IMDG, IATA	not regulated
Transport hazard class(es)	
DOT, ADN, IMDG, IATA	
Class	not regulated
Packing group	
DOT, IMDG, IATA	not regulated
Environmental hazards:	Not applicable.
Transport in bulk according to Annex	
MARPOL73/78 and the IBC Code	Not applicable.
Special precautions for user	Not applicable.

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

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- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- TSCA (Toxic Substances Control Act): Substance is not listed.
- · Hazardous Air Pollutants Substance is not listed.

· Proposition 65

- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- · TLV (Threshold Limit Value) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

All chemicals may pose unknown hazards and should be used with caution. This SDS applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. Cayman Chemical Company assumes no responsibility for incidental or consequential damages, including lost profits, arising from the use of these data. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Cayman Chemical Company assumes no responsibility for the completeness or accuracy of the information contained herein.

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Department issuing SDS: Environment protection department.	
Contact: -	
Date of previous version 11/16/2021	
Date of preparation 09/18/2024	
Abbreviations and acronyms:	
IMDG: International Maritime Code for Dangerous Goods	
DOT: US Department of Transportation	
IATA: International Air Transport Association	
CAS: Chemical Abstracts Service (division of the American Chemical Society)	
NFPA: National Fire Protection Association (USA)	
HMIS: Hazardous Materials Identification System (USA)	
PBT: Persistent, Bioaccumulative and Toxic	
vPvB: very Persistent and very Bioaccumulative	
NIOSH: National Institute for Occupational Safety	
OSHA: Occupational Safety & Health	
TLV: Threshold Limit Value	
PEL: Permissible Exposure Limit	
REL: Recommended Exposure Limit	
* Data compared to the previous version altered.	
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