



SAFETY DATA SHEET

Biotin-XX-α-Bungarotoxin

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

1.1. Product identifier

Trade name

Biotin-XX-α-Bungarotoxin

Other names / Synonyms

00017: Biotin-XX α-Bungarotoxin, 0.5 mg

Product no.

00017 Other means of identification

EC No.: 234-266-6 CAS No.: 11032-79-4

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

Relevant identified uses of the substance or mixture

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use. Restricted to professional users.

Use descriptors (REACH)

Sectors of use	Description	
SU 24	Scientific research and development	
Product category	Description	
PC 21	Laboratory Chemicals	
Process category	Description	
PROC 15	Use as laboratory reagent	

Uses advised against

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

1.3. Details of the supplier of the safety data sheet

Company and address

Biotium, Inc. 46117 Landing Parkway CA 94538 Fremont USA T: +1 510-265-1027 Fax: +1 510-265-1352 http://www.biotium.com E-mail techsupport@biotium.com Revision 14/07/2025

SDS Version 1.0

1.0

1.4. Emergency telephone number

Anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day) See also section 4 "First aid measures".

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed. Acute Tox. 4; H312, Harmful in contact with skin.



Acute Tox. 4; H332, Harmful if inhaled. 2.2. Label elements Hazard pictogram(s) Signal word Warning Hazard statement(s) Harmful if swallowed, in contact with skin or if inhaled. (H302+H312+H332) Precautionary statement(s) General Prevention Avoid breathing dust. (P261) Use only outdoors or in a well-ventilated area. (P271) Wear eye protection/face protection/protective gloves. (P280) Response IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340) Call a POISON CENTER/doctor if you feel unwell. (P312) Storage Disposal Dispose of contents/container in accordance with local regulation. (P501) Hazardous substances α-Bungarotoxin Additional labelling Not applicable. 2.3. Other hazards Additional warnings This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707. SECTION 3: Composition/information on ingredients

3.1. Substances

Product/substance	Identifiers	% w/w	Classification	Note
α-Bungarotoxin	CAS No.: 11032-79-4	95-100%	Acute Tox. 4, H302	
	EC No.: 234-266-6		Acute Tox. 4, H312	
	REACH:		Acute Tox. 4, H332	
	Index No.:			

3.2. Mixtures

Not applicable. This product is a substance.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

No ingredients present at concentrations classified as harmful to health or the environment.

SECTION 4: First aid measures

4.1. Description of first aid measures General information



In the case of accident: Contact a doctor or casualty department – bring the label or this safety data sheet. The doctor can contact the Anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day) Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Burns

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

None known.

4.3. Indication of any immediate medical attention and special treatment needed Call a POISON CENTER/doctor if you feel unwell.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances. Ensure adequate ventilation, especially in confined areas. Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Limit spillage, sweep up and shovel into appropriate containers for disposal. Store in suitable, closed containers for disposal.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.



SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with the product. Avoid contact during pregnancy and while nursing. Smoking, drinking and consumption of food is not allowed in the work area. See section 8 "Exposure controls/personal protection" for information on personal protection. 7.2. Conditions for safe storage, including any incompatibilities

Recommended storage material

Always store in containers of the same material as the original container.

Storage conditions

Freezer -10°C to -35°C. Desiccate. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the Belgium list of substances with an occupational exposure limit.

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Туре	Class	Colour	Standards	
Not required; ex case of aerosol formation.	kcept in		N/A	

Skin protection

No specific requirements. Hand protection



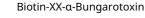
According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.				

TypeStandardsSafety glasses with
side-shields
conforming to EN166.
Use equipment for eye
protection tested and
approved under
appropriate
government standards
such as NIOSH (US) or
EN 166(EU).EN166

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state
Solid
Colour
No data available.
Odour / Odour threshold
No data available.
рН
No data available.
Density (g/cm³) No data available.
Kinematic viscosity Does not apply to solids.
Particle characteristics
No data available.
Phase changes
Melting point/Freezing point (°C)
No data available.
Softening point/range (°C)
Does not apply to solids.
Boiling point (°C)
Does not apply to solids.
Vapour pressure
No data available.
Relative vapour density
Does not apply to solids.
Decomposition temperature (°C)
No data available.
Data on fire and explosion hazards





Flash point (°C) Does not apply to solids. Flammability (°C) No data available. Auto-ignition temperature (°C) No data available. Lower and upper explosion limit (% v/v) Does not apply to solids. Solubility Solubility in water Soluble in water n-octanol/water coefficient (LogKow) No data available. Solubility in fat (g/L) No data available. 9.2. Other information Other physical and chemical parameters No data available. Oxidizing properties No data available. SECTION 10: Stability and reactivity 10.1. Reactivity No data available. 10.2. Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage". 10.3. Possibility of hazardous reactions None known. 10.4. Conditions to avoid Heat, flames and sparks. 10.5. Incompatible materials Strong acids, strong bases, strong oxidizing agents, and strong reducing agents. 10.6. Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced. SECTION 11: Toxicological information 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Skin corrosion/irritation Based on available data, the classification criteria are not met. Serious eye damage/irritation Based on available data, the classification criteria are not met. Respiratory sensitisation Based on available data, the classification criteria are not met. 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

Long term effects

None known.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

12.3. Bioaccumulative potential

Based on available data, the classification criteria are not met.

- 12.4. Mobility in soil
 - No data available.
- 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

- 12.7. Other adverse effects
 - None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste. HP 6 - Acute toxicity Dispose of contents/container to an approved waste disposal plant. Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste. EWC code Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio
ADR	UN2811 TOXIC SOLID, ORGANIC, N.O.S.	Transport hazard class: 6.1 Label: 6.1 Classification code: T2	III	No	n: Limited quantities: 5 kg Tunnel restriction code: (E) See below for additional



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

	14.1 14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
					information
IMDG	UN2811 TOXIC SOLID, ORGANIC, N.O.S.	Transport hazard class: 6.1 Label: 6.1 Classification code: T2	Π	No	Limited quantities: 5 kg EmS: F-A S- A See below for additional information
ΙΑΤΑ	UN2811 TOXIC SOLID, ORGANIC, N.O.S.	Transport hazard class: 6.1 Label: 6.1 Classification code: T2	III	No	See below for additional information

** Environmental hazards

Additional information

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments No data available.

NU Uala avaliable.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

Labor Law of 24-01-1985, updated 31-12-2020.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on

classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).



15.2. Chemical safety assessment No SECTION 16: Other information Full text of H-phrases as mentioned in section 3 H302, Harmful if swallowed. H312, Harmful in contact with skin. H332, Harmful if inhaled. The full text of identified uses as mentioned in section 1 SU 24 = Scientific research and development PROC 15 = Use as laboratory reagent PC 21 = Laboratory Chemicals Abbreviations and acronyms ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service CE = Conformité Européenne (European conformity) CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] CSA = Chemical Safety Assessment CSR = Chemical Safety Report DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EINECS = European Inventory of Existing Commercial chemical Substances ES = Exposure Scenario EUH statement = CLP-specific Hazard statement EuPCS = European Product Categorisation System EWC = European Waste Catalogue GHS = Globally Harmonized System of Classification and Labelling of Chemicals GWP = Global warming potential IARC = International Agency for Research on Cancer (IARC) IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OECD = Organisation for Economic Co-operation and Development PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SCL = A specific concentration limit SVHC = Substances of Very High Concern STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative Additional information The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP). The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a quide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically gualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

The safety data sheet is validated by

Julianne Davis



Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: BE-en