

SAFETY DATA SHEET

according to OSHA HCS



Batroxobin maranhao

101-06

1 Identification

Product identifier

Product	Batroxobin maranhao
Article number	101-06
Application of the substance / the mixture	Raw material for further processing in diagnostic preparations

Details of the supplier of the safety data sheet

Manufacturer/Supplier	DSM Nutritional Products Ltd Branch Pentapharm Dornacherstrasse 112 CH-4147 Aesch BL / Switzerland Phone +41 61 706 48 48 Fax +41 61 706 48 00
Information department	pentapharm@pentapharm.com
Emergency telephone number	Tox Info Suisse: +41 44 251 51 51 (24h; 7 days a week)

2 Hazard(s) identification

Classification of the substance or mixture



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Label elements

GHS label elements

The product is classified and labeled according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS08

Signal word Danger

Hazard-determining components of labeling:

Batroxobin (glycoprotein, serine proteinase)

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Hazard statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P284 [In case of inadequate ventilation] wear respiratory protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a poison center/doctor.

Additional information

1-<2.5% of the mixture consists of component(s) of unknown toxicity extracted from snake venom. Classification of the product is based on the calculation method. This product itself has not been tested.

3 Composition/information on ingredients

Chemical characterization

Mixtures

Description

Mixture of the substances listed below with nonhazardous additions.

Dangerous components		
CAS: 9039-61-6	Batroxobin (glycoprotein, serine proteinase)	1 - <2.5%
CAS: 26628-22-8	sodium azide	<0.1%

4 First aid measures

Description of first aid measures

General information

No special measures required.

After inhalation

If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a poison center/doctor.

After skin contact

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention

After eye contact

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.

After swallowing

Immediately call a poison center/doctor.

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Most importance symptoms and effects, both acute and delayed

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents

CO₂, foam, dry powder or water.

Specific hazards arising from the substance or mixture

No further relevant information available.

Advice for firefighters

Protective equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact and particle inhalation.

Environmental precautions

Do not allow product to reach sewage system or any water course.

Methods and material for containment and cleaning up

Collect in suitable containers.

Clean the affected area carefully and ensure adequate ventilation.

Avoid dust formation.

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

Avoid skin and eye contact and particle inhalation.

Information about protection against explosions and fires

No special measures required.

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Conditions for safe storage, including any incompatibilities storage

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

Store in cool, dry conditions in well-sealed receptacles.

Store between 2 - 8 °C.

Protect from heat and direct sunlight.

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

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

CAS: 26628-22-8	Sodium azide
REL	Ceiling limit value: 0.3** mg/m ³ , 0.1* ppm *as HN ₃ ; **as NaN ₃ ; Skin
TLV	Ceiling limit value: 0.29** mg/m ³ , 0.11* ppm *as HN ₃ vapor **as NaN ₃

Exposure controls

Personal protective equipment

General protective and hygienic measures

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with eyes and skin.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing.

Breathing equipment

In case of inadequate ventilation wear respiratory protection.

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Protection of hands



Protective gloves

Eye protection



Safety glasses

Limitation and supervision of exposure into the environment

Do not allow product to reach sewage system or any water course.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information	
Appearance	
Form	Lyophilized powder.
Color	White.
Odor	Odorless.
Odor threshold	Not determined.
pH-value	Not determined.
Change in condition	
Melting point/Melting range	Not determined.
Boiling point/Boiling range	Not determined.
Flash point	Not applicable.
Flammability (solid, gaseous)	Not determined.
Ignition temperature	
Decomposition temperature	Not determined.
Self-igniting	Product is not self-igniting.
Danger of explosion	Product does not present an explosion hazard.
Explosion limits	
Lower	Not determined.
Upper	Not determined.
Oxidising properties	Not determined.
Vapour pressure	Not applicable.

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Density	
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water	Soluble.
Partition coefficient (n-octanol/water)	
Not determined.	
Viscosity	
Dynamic	Not applicable.
Kinematic	Not applicable.

10 Stability and reactivity

Reactivity

No further relevant information available.

Chemical stability

No information available.

Thermal decomposition / conditions to be avoided

No decomposition if used according to specifications.

Possibility of hazardous reactions

No dangerous reactions known.

Conditions to avoid

Heat may cause this product to decompose.

Incompatible materials

None known.

Hazardous decomposition products

Nature of decomposition products not known.

11 Toxicological information

Information on toxicological effects

Acute toxicity

1-<2.5% of the mixture consists of component(s) of unknown toxicity extracted from snake venom.

The toxicological properties of this product have not been thoroughly investigated.

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.

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Sensitization

Classification of the product is derived from the starting material (snake venom) and general knowledge of enzyme properties. This product itself has not been tested.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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.

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

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

Other information (about experimental toxicology)

The toxicological properties of this product have not been thoroughly investigated. Use appropriate precautions.

Subacute to chronic toxicity: No data available.

OSHA-Ca (Occupational Safety & Health Administration)
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None of the ingredients is listed.

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.

Other adverse effects

No further relevant information available.

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Waste treatment methods

Recommendation: Dispose of according to federal, state, and local law.

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UN-number

DOT, ADR/ADN, IMDG, IATA Void

DOT Void

ADR/ADN Void

IMDG, IATA Void

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class	Void
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Packing group

DOT, ADR/ADN, IMDG, IATA Void

Marine pollutant	No applicable.
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Special precautions for user	No applicable.
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of MARPOL 73/78 and the IBC Code	Not applicable.
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ADR/ADN

Remarks	Not classified.
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IMDG

Remarks	Not classified.
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IATA

Remarks	Not classified.
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UN “Model Regulation”	Void
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15 Regulatory information

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

HMIS-ratings (scale 0-4): Not determined.

SARA Section 355 (extremely hazardous substances)		
CAS: 26628-22-8	Sodium azide	

SARA Section 313 (Specific toxic chemical listings)		
CAS: 26628-22-8	Sodium azide	

TSCA (Toxic Substances Control Act):		
CAS: 9000-70-8	Gelatines	Active
CAS: 56-40-6	Glycine	Active
CAS: 7732-18-5	Water, distilled, conductivity or of similar purity	Active
CAS: 26628-22-8	Sodium azide	Active

Hazardous Air Pollutants		
None of the ingredients is listed.		

California Proposition 65

Chemicals known to cause cancer		
None of the ingredients is listed.		

Chemicals known to cause reproductive toxicity for females		
None of the ingredients is listed.		

Chemicals known to cause reproductive toxicity for males		
None of the ingredients is listed.		

Chemicals known to cause developmental toxicity		
None of the ingredients is listed.		

Carcinogenicity categories

EPA (Environmental Protection Agency)		
None of the ingredients is listed.		

IARC (International Agency for Research on Cancer)		
None of the ingredients is listed.		

TLV (Threshold Limit Value)		
CAS: 26628-22-8	Sodium azide	A4

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NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

16 Other information

All information and instructions provided in this Safety Data Sheet are based on the current state of scientific and technical knowledge at the date indicated on this Safety Data Sheet. DSM Nutritional Products Ltd Branch Pentapharm shall not be held responsible for any defect in the product covered by this Safety Data Sheet, should the existence of such a defect not be detectable considering the current state of scientific and technical knowledge.

NFPA-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

Date of preparation / last revision

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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

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

DOT: US Department of Transportation

IATA: International Air Transport Association

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health Administration

OSHA-Ca: U.S. OSHA designated carcinogen list

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Resp. Sens. 1: Respiratory sensitisation - Category 1

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