SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH), Generic EU SDS - No country specific data

Biosilk 521

Version number: 3.0
Issued: 2025-10-13
Replaces SDS: 2020-07-01

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

1.1. Product identifier

Trade name

Biosilk 521

Article No.

BS521-0101

Contains

Clear, colorless solution with PBS buffered saline, 1% glycerol, 0.002% sodium azide with a pH of 7.4

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

Product type

Recombinant spider silk protein, functionalized with human recombinant laminin 521 protein (Biolaminin 521 LN), for 3D cell culture applications.

Relevant identified uses

For research cell culture applications.

Not suitable for use in

Not for use in medical or diagnostic procedures.

1.3. Details of the supplier of the safety data sheet

Supplier

BioLamina AB

Address
Löfströms allé 5
17266 Sundbyberg
Sweden

Email
Quality.support@biolamina.com

Web site
https://biolamina.com/

1.4. Emergency telephone number

In case of emergency, call the local emergency number. European Union: 112

Available outside office hours

Yes

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
The product is not classified as hazardous according to Regulation (EC) No 1272/2008.

2.2. Label elements
The product does not require labelling in accordance with CLP Regulation (EC) No 1272/2008.

2.3. Other hazards
This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Sodium Azide	26628-22-8 247-852-1 - 011-004-00-7	>0 - <0.01%	Acute Tox. 2 - oral, Acute Tox. 1 - dermal, Acute Tox. 2 - inhala-tion, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1	H300, H310, H330, H373, H400, H410, EUH032 M-acut=1 M-chro=1	-

Product based on
PBS buffered saline, 1% glycerol, 0.002% sodium azide

Substance additional information
For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. 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.
Do not leave the victim unattended.

Inhalation
In case of discomfort: bring the person into fresh air. Consult a physician if necessary.

Skin contact
Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact
Rinse gently with lukewarm water. Remove any contact lenses if this is easy to do. Continue rinsing. Protect unharmed eye. In case of persistent eye irritation or discomfort: Seek medical help.

Ingestion
Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.

Information for doctors
Treat symptomatically.

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

Treat symptomatically.

Other

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are: carbon oxides

5.3. Advice for firefighters
Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and protective suit.

Measures in case of fire
Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation, especially in confined areas. Contaminated areas may be slippery. Use personal protection equipment.

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
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections
SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 13: Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Preventive handling precautions
Always wear recommended Personal Protective Equipment. For personal protection, see section 8. Smoking, eating and drinking should be prohibited in the application area.

General hygiene
Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities
Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

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
Exposure limits
This is a generic EU SDS - No country specific data is included. Consult national legislation.

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m³	Short-term exposure limit ppm / mg/m³	Source	Remark	Year
Sodium Azide (EU)	26628-22-8 247-852-1	- / 0.1	- / 0.3	Occupational Exposure Limits - 1st list, Commission Directive 2000/39/EC	Skin: Possibility of significant uptake through the skin	2000

DNEL/DMEL

Product/Substance name (CAS No./EC No.)	Type	Exposure	Value	Population	Effects
Sodium Azide (26628-22-8/247-852-1)	DNEL	Chronic (long term) Inhalation	493 µg/m³	Workers	Systemic
Sodium Azide (26628-22-8/247-852-1)	DNEL	Chronic (long term) Dermal	140 µg/kg bw/day	Workers	Systemic
Sodium Azide (26628-22-8/247-852-1)	DNEL	Chronic (long term) Inhalation	87 µg/m³	Consumers	Systemic
Sodium Azide (26628-22-8/247-852-1)	DNEL	Chronic (long term) Dermal	50 µg/kg bw/day	Consumers	Systemic
Sodium Azide (26628-22-8/247-852-1)	DNEL	Chronic (long term) Oral	50 µg/kg bw/day	Consumers	Systemic

PNEC/PEC

Product/Substance name (CAS No./EC No.)	Type	Environmental compartment	Value
Sodium Azide (26628-22-8/247-852-1)	PNEC	Freshwater	350 ng/L
Sodium Azide (26628-22-8/247-852-1)	PNEC	Intermittent releases (freshwater)	3.5 µg/l
Sodium Azide (26628-22-8/247-852-1)	PNEC	Marine water	15 ng/L
Sodium Azide (26628-22-8/247-852-1)	PNEC	Intermittent releases (marine water)	150 ng/L
Sodium Azide (26628-22-8/247-852-1)	PNEC	Sewage Treatment Plant	30 µg/l
Sodium Azide (26628-22-8/247-852-1)	PNEC	Sediment (freshwater)	16.7 µg/kg
Sodium Azide (26628-22-8/247-852-1)	PNEC	Sediment (marine water)	720 ng/kg dwt

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Compliance with the given occupational exposure limits values should be controlled on a regular basis – Consult national legislation. Smoking, drinking and consumption of food is not allowed in the work area.

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above and consult any national legislation.

The formation of vapours must be kept at a minimum and below current limit values (see above and consult national legislation). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Avoid inhalation of vapours. Wash hands after use.

Eye / face protection

Safety Glasses (EN 166)

Hand protection

Protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the material safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Other skin protection
Wear suitable protective clothing.

Respiratory protection
No personal respiratory protective equipment normally required.
In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls
No special environmental precautions required.

Other
Use only CE-marked or locally approved protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Liquid

Colour
Colorless

Odour
None

Odour threshold
No data available

Melting point / freezing point
No data available

Boiling point or initial boiling point and boiling range
No data available

Flammability
No data available

Lower and upper explosion limit
No data available

Flash point
No data available

Auto-ignition temperature
No data available

Decomposition temperature
No data available

pH
7 - 8

Kinematic viscosity
No data available

Viscosity, dynamic
No data available

Solubility
Completely miscible

Water solubility
No data available

Partition coefficient n-octanol/water
No data available

Vapour pressure
No data available

Density and/or relative density
No data available

Relative density
No data available

Relative vapour density
No data available

Explosive properties
No data available

Oxidising properties
The substance or mixture is not classified as oxidizing.

Particle characteristics
No data available

9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use. Stable under recommended storage conditions. No hazards to be specially mentioned.

10.4. Conditions to avoid
No data available

10.5. Incompatible materials
No data available

10.6. Hazardous decomposition products
No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity
Based on available data, the classification criteria are not met.

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 or 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.

Repeated dose toxicity
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

Endocrine disrupting properties
The product does not contain any known or suspected endocrine disruptors.

SECTION 12: Ecological information

12.1. Toxicity
Contains no substance known to be hazardous to the environment or not degradable in waste water treatment plants.

12.2. Persistence and degradability
No data available

12.3. Bioaccumulative potential
No data available

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties
The product does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Can be disposed as waste water, when in compliance with local regulations.

Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14: Transport information

14.1. UN number

Not regulated as a dangerous good

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Other

Not applicable

SECTION 15: Regulatory information

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

EU regulations

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

Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (CLP)

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals - Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) - Not applicable
Restricted substances under EC 1907/2006, Annex XVII - Not applicable
Authorised substances under EC 1907/2006, Annex XIV - Not applicable

Regulation (EU) 2024/590 of the European Parliament and of the Council of 7 February 2024 on substances that deplete the ozone layer, and repealing Regulation (EC) No 1005/2009 - Not applicable

Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants - Not applicable

Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC - Not applicable

National regulations

Local laws and regulations should be carefully observed.

15.2. Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

Other

Restricted to professional users.

SECTION 16: Other information

Changes to previous revision

General update and review of all sections

Abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways;
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road;
bw - Body weight;
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008;
CMR - Carcinogen, Mutagen or Reproductive Toxicant;
ECHA - European Chemicals Agency; EC-Number - European Community number;
ECx - Concentration associatedwith x% response;
ELx - Loading rate associated with x% response;
ErCx - Concentration associated with x% growth rate response;
IATA - International Air Transport Association;
IC50 - Half maximal inhibitory concentration;
ICAO - International Civil Aviation Organization;
IMDG - International Maritime Dangerous Goods;
IMO - International Maritime Organization;
ISO - International Organisation for Standardization;
LC50 - Lethal Concentration to 50 % of a test population;
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose);
NO(A)EC - No Observed (Adverse) Effect Concentration;
NO(A)EL - No Observed (Adverse) Effect Level;
OECD - Organization for Economic Co-operation and Development;
PBT - Persistent, Bioaccumulative and Toxic substance;
REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals;
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail;
SDS - Safety Data Sheet;
SVHC - Substance of Very High Concern;
UN - United Nations;
vPvB - Very Persistent and Very Bioaccumulative

References to key literature and data sources

European Chemicals Agency Website (ECHA)
Previous versions of SDS'

Evaluation methods for classification

Calculation method.

Phrase meaning

Acute Tox. 2 - oral - Acute toxicity, oral, hazard category 2
Acute Tox. 1 - dermal - Acute toxicity, dermal, hazard category 1
Acute Tox. 2 - inhalation - Acute toxicity, inhalation, hazard category 2
STOT RE 2 - Specific Target Organ Toxicity — Repeated exposure, hazard category 2
Aquatic Acute 1 - Hazardous to the aquatic environment — Acute hazard category 1
Aquatic Chronic 1 - Hazardous to the aquatic environment — Chronic hazard category 1
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H330 Fatal if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure .
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH032 Contact with acids liberates very toxic gas.

Additional information

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.