SAFETY DATA SHEET

According to Regulation (US HCS) 29 CFR 1910.1200

Version number: 1.0
Issued: 2026-01-28

Biolaminin 521 CTG

SECTION 1: Identification

Product identifier used on the label

Trade name
Biolaminin 521 CTG

Other means of identification

Article No.
CT521-0501, CT521-5001

Contains
Clear, colorless solution with a pH of 7.5 with 20 mM HEPES, 0.25 M NaCl, 10% glycerol

Recommended use of the chemical and restrictions on use

Product type
Human recombinant laminin for use as cell culture substrate.

Use
For cell culture applications in research or as raw material in manufacturing of cell, gene or tissue based medicinal products.

Not suitable for use in
Not for use in medical or diagnostic procedures.

Supplier's details

Supplier
BioLamina AB

Address
Löfströms allé 5
172 66 Sundbyberg
Sweden

Email
Quality.support@biolamina.com

Web site
biolamina.com

Emergency phone number

1-800-222-1222 or use the web POISONCONTROL® (triage.webpoisoncontrol.org)

Available outside office hours
Yes

SECTION 2: Hazard identification

Classification of the substance or mixture and any national or regional information

The product is not classified as hazardous according to Regulation (US HCS) 29 CFR 1910.1200

Label elements, including precautionary statements

The product does not require labeling in accordance with Regulation (US HCS) 29 CFR 1910.1200

Other hazards which do not result in classification

This product does not contain any PBT or vPvB substances.

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

The chemical, physical, and toxicological properties of the product have not been fully evaluated. Exposure by any route should be avoided.

SECTION 3: Composition/information on ingredients

Mixture

Product based on

20 mM HEPES, 0.25 M NaCl, 10% glycerol

Does not contain any substances required to report.

SECTION 4: First-aid measures

Description of necessary first-aid measures

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

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

Wash exposed skin thoroughly with water and soap. In the event of 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.

Most important symptoms/effects, acute and delayed
None known.

Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically.

Other

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

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) 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
Water jets should not be used, since they can spread the fire.

Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products).
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:
Halogenated compounds
Carbon oxides (CO / CO2)
Some metal oxides

Special protective actions for fire-fighters

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

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas. Contaminated areas may be slippery. Use personal protection equipment.

Environmental precautions

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

Methods and materials 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.

Reference to other sections

SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 13: Disposal considerations

SECTION 7: Handling and storage

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.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Specific end use(s)

This product should only be used for the uses described in Section 1.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure limits

Ingredient	CAS No.	Exposure limit ppm / mg/m³	Source	Remark	Year
Glycerol (mist)	56-81-5	- / 15	OSHA PEL (Table Z-1)	8-hour TWA, total dust, Skin notation: No	-
Glycerol (mist)	56-81-5	- / 5	OSHA PEL (Table Z-1)	8-hour TWA, respirable fraction, Skin notation: No	-
Glycerol (mist)	56-81-5	- / 10	Cal/OSHA PEL	8-hour TWA, total dust, Skin notation: No	-
Glycerol (mist)	56-81-5	- / 5	Cal/OSHA PEL	8-hour TWA, respirable fraction, Skin notation: No	-

Appropriate engineering controls

Apply general control to prevent unnecessary exposure. Ensure adequate ventilation, especially in confined areas. Compliance with the given occupational exposure limits values should be controlled on a regular basis. 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 vapors 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 workroom is not sufficient is recommended. Avoid inhalation of vapors. Wash hands after use.

Individual protection measures, such as personal protective equipment

Eye / face protection
Wear approved safety goggles.

Hand protection
Protective gloves

Use only protective gloves with a recognized certification mark, e.g. the UL mark. 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 is normally required.
In case of inadequate ventilation, wear respiratory protection.

Environmental exposure controls
No special environmental precautions are required.

Other
Use only protective equipment with a recognized certification mark, e.g. the UL mark.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state
Liquid

Color
Clear colorless to slightly opalescent solution

Odor
None

Odor 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 (log value)
No data available

Vapor pressure (includes evaporation rate)
No data available

Density and/or relative density
No data available

Relative vapor density
No data available

Explosive properties
No data available

Oxidizing properties
The mixture is not classified as oxidizing.

Particle characteristics
No data available

Other information
No data available

SECTION 10: Stability and reactivity

Reactivity
No dangerous reaction known under conditions of normal use.

Chemical stability
Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use. Stable under recommended storage conditions. No hazards to be specifically mentioned.

Conditions to avoid

No data available

Incompatible materials

No data available

Hazardous decomposition products

No data available

SECTION 11. Toxicological information

Information on the likely routes of exposure

Via eye contact, skin contact, by inhalation or ingestion.

The chemical, physical, and toxicological properties of the product have not been fully evaluated. Exposure by any route should be avoided.

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.

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.

Symptoms related to the physical, chemical and toxicological characteristics
None known.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
No data available

Interactive effects
No data available

Information on other hazards

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

SECTION 12: Ecological information

Ecotoxicity
Contains no substance known to be hazardous to the environment or not degradable in wastewater treatment plants.

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Results of PBT and vPvB assessment
This product does not contain any PBT or vPvB substances.

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

Other adverse effects
No data available

SECTION 13: Disposal considerations

Disposal methods

Disposal considerations
RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)
None of the components are listed

Can be disposed of as wastewater, 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. Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

UN number
Not regulated as a dangerous good

UN proper shipping name
Not applicable

Transport hazard class(es)
Not applicable

Packing group
Not applicable

Environmental hazards
Not applicable

Special precautions for user
Not applicable

Transport in bulk according to IMO instruments
Not applicable

Other
Not applicable

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

U.S. Federal regulations

OSHA Hazard Communication Standard (29 CFR 1910.1200)

RCRA Hazardous waste (40 CFR 261)

TSCA (the non-confidential portion):
Glycerol is listed

Clean Air Act:
None of the components are listed

EPCRA Section 302:
None of the components are listed

EPCRA Section 304:
None of the components are listed

EPCRA section 313:
None of the components are listed

CERCLA:
None of the components are listed

Hazardous chemical inventory reporting:
This product is not subject to Tier II reporting.

State regulations

California / Prop. 65:
None of the components are listed

Massachusetts / Right To Know Act:
Glycerol is listed

New Jersey / Right To Know Act:
Glycerol / Substance number: 3319

New York / Right To Know Act:
None of the components are listed

Pennsylvania / Right To Know Act:
Glycerol is listed

Other regulations, limitations and legal regulations
Local laws and regulations should be carefully observed.

Chemical safety assessment
No

Other
Restrictions for application - Restricted to professional users.
Demands for specific education - No specific requirements.

SECTION 16: Other information

Date of preparation or last revision
New safety data sheet 2026-01-28

Abbreviations
ACGIH - American Conference of Governmental Industrial Hygienists
CAS - Chemical Abstracts Service
CERCLA - Comprehensive Environmental Response Compensation and Liability Act
EPCRA - Emergency Planning and Community Right-To-Know Act
HCS - Hazard Communication Standard
NIOSH - National Institute for Occupational Safety and Health
OSHA - Occupational Safety and Health Administration
PBT - Persistent, Bioaccumulative and Toxic substance
PEL - Permissible Exposure Limits
RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limits
STEL - Short-term exposure limits
STOT - Specific Target Organ Toxicity
TLV - Threshold Limit Values
TSCA - The Toxic Substances Control Act
TWA - Time weighted average
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

References to key literature and data sources
The National Institute for Occupational Safety and Health (NIOSH)
OSHA Occupational Chemical Database Advanced Search
OSHA Hazard Communication Standard (29 CFR 1910.1200)
29 CFR Part 1910 Subpart Z
TSCA Inventory
Previous version of SDS (EU)

Evaluation methods for classification
Calculation method

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.