SAFETY DATA SHEET

According to Regulation (US HCS) 29 CFR 1910.1200

Version number: 1.0
Issued: 2026-01-29

Biolaminin 221 LN

SECTION 1: Identification

Product identifier used on the label

Trade name
Biolaminin 221 LN

Other means of identification

Article No.
LN221-02, LN221-0501

Contains
Clear, colorless, buffered solution with a pH of 7.2 with 10% glycerol and 0.02% sodium azide

Recommended use of the chemical and restrictions on use

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

Use
For research cell culture applications.

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

Chemical name	CAS No. Other unique identifiers	Concentration	Classification	H-phrase	Note
Sodium Azide	26628-22-8	>0 - <0.05%	Acute Tox. 2 – oral, Acute Tox. 1 – dermal Acute Tox. 2 - inhalation STOT RE 2	H300, H310, H330, H373	Contact with acids liberates very toxic gas

Product based on

PBS buffered saline, 10% glycerol, 0.02% sodium azide

Substance additional information

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

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
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: carbon 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 applications quoted in Section 1.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure limits

Ingredient	CAS No.	Exposure limit ppm / mg/m³	Ceiling exposure limit ppm / mg/m³	Source	Remark	Year
Sodium Azide	26628-22-8	- / -	- / 0.3	NIOSH REL	As NaN3, Skin notation: Yes	-
Sodium Azide	26628-22-8	- / -	- / 0.29	ACGIH TLV	As NaN3, Skin notation: No	-
Sodium Azide	26628-22-8	- / -	0.1 / 0.3	Cal/OSHA PEL	Skin notation: Yes	-
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 normally required.
In case of inadequate ventilation, wear respiratory protection.

Environmental exposure controls
No special environmental precautions 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

Colour
Colorless

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 substance or 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 sensitization
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)
Sodium azide is listed with EPA Hazardous Waste Number: P105

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
Sodium azide is listed

Clean Air Act:
None of the components are listed

EPCRA Section 302:
Sodium azide is regulated with a Threshold Planning Quantity (TPQ) of: 500 pounds

EPCRA Section 304:
Sodium azide is regulated with a Reportable Quantity (RQ) of: 1000 pounds

EPCRA section 313:
Sodium azide is listed

CERCLA:
Sodium azide is regulated with a Reportable Quantity (RQ) of: 1000 pounds

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
Sodium azide is listed

New Jersey / Right To Know Act:
Glycerol / Substance number: 3319
Sodium azide / Substance number: 1684 (Sodium azide is on the Special Health Hazard Substance List)

New York / Right To Know Act:
Sodium azide is listed

Sodium azide is regulated with a Reportable Quantity (RQ) of: 1000 pounds Sodium azide is regulated with a Threshold Reporting Quantity (TRQ) of: 0 pounds Sodium azide is regulated with a Threshold Planning Quantity (TPQ) of: 500 pounds

Pennsylvania / Right To Know Act:
Glycerol is listed
Sodium azide is listed
Sodium azide is hazardous to the environment (E)

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 (2026-01-29)

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

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
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.

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.