SAFETY DATA SHEET

According to Regulation (US HCS) 29 CFR 1910.1200

Version number: 1.0
Issued: 2026-02-09

Biolaminin 332 LN

SECTION 1: Identification

Product identifier used on the label

Trade name
Biolaminin 332 LN

Other means of identification

Article No.
LN332-0202, LN332-0502

Contains
Clear, colorless, buffered solution with a pH of 7.2 with 0.005% Brij 35, 0.01% CHAPS, 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
17266 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
N,N-dimethylformamide	68-12-2	>0 - <0.0015%	Flam. Liq. 3 Acute Tox. 4 - dermal Eye Irrit. 2 Acute Tox. 4 - Inhalation Repr. 1B	H226, H312, H319, H332, H360	

Product based on

PBS buffered saline, 0.005% Brij 35, 0.01% CHAPS, 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
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	-
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	-
N,N-dimethylformamide	68-12-2	10 / 30	- / -	OSHA PEL (Table Z-1)	8-hour TWA, Skin notation: Yes	-
N,N-dimethylformamide	68-12-2	10 / 30	- / -	Cal/OSHA PEL	8-hour TWA, Skin notation: Yes	-
N,N-dimethylformamide	68-12-2	10 / 30	- / -	NIOSH REL	Up to 10-hour TWA, Skin notation: Yes	-
N,N-dimethylformamide	68-12-2	5 / 15	- / -	ACGIH TLV	8-hour TWA, Skin notation: Yes	-

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.

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

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 (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. N,N-dimethylformamide has been classified by IARC as a group 2A carcinogen.

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
N,N-dimethylformamide is listed

Clean Air Act:
N,N-dimethylformamide is regulated as a hazardous air pollutant (HAPS)

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
N,N-dimethylformamide is listed

CERCLA:
Sodium azide is regulated with a Reportable Quantity (RQ) of: 1000 pounds
N,N-dimethylformamide is regulated with a Reportable Quantity (RQ) of: 100 pounds

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

State regulations

California / Prop. 65:
N,N-dimethylformamide is known to cause: Cancer

Massachusetts / Right To Know Act:
Glycerol is listed
Sodium azide is listed
N,N-dimethylformamide 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)
N,N-dimethylformamide / Substance number: 0759 (N,N-dimethylformamide 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

N,N-dimethylformamide is listed
N,N-dimethylformamide is regulated with a Reportable Quantity (RQ) of: 1 pounds
N,N-dimethylformamide is regulated with a Threshold Reporting Quantity (TRQ) of: 0 pounds

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

Changes to previous revision
New safety data sheet (2026-02-09)

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
IARC - International Agency for Research on Cancer
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
Flam. Liq. 3 - Flammable liquids, hazard category 3
Acute Tox. 4 - dermal - Acute toxicity, dermal, hazard category 4
Eye Irrit. 2 - Eye irritation, hazard category 2
Acute Tox. 4 - inhalation - Acute toxicity, inhalation, hazard category 4
Repr. 1B - Reproductive toxicity, hazard category 1B
H226 Flammable liquid and vapour.
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H312 Harmful in contact with skin.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H360D May damage the unborn child
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.