

## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### Laminin-411

Version 1.0

Print Date 02.05.2016

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

### 1.1 Product identifier

Commercial Product Name : Human recombinant laminin-411

Mat.-No./ Genisys-No. : LN411-01

LN411-02

LN411-03

LN411-04

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

Recommended restrictions on use: For research use only.

### 1.3 Details of the supplier of the material safety data sheet

Company : BioLamina AB  
Löfströms Allé 5A  
17266 Sundbyberg  
Sweden  
E-mail address : info@biolamina.com  
Telephone : +46858885180  
Telefax : +46851989288

### 1.4 Emergency telephone number

In case of emergencies: : 112

08-33 1231 (Swedish Poisons Information Centre)

Outside of Sweden: +46 8 33 1231

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

*Classification (REGULATION (EC) No 1272/2008)*

Not a hazardous substance or mixture.

*Classification (67/548/EEC, 1999/45/EC)*

Not a hazardous substance or mixture.

### 2.2 Label elements

*Labelling (REGULATION (EC) No 1272/2008)*

Not a hazardous substance or mixture.

### 2.3 Other hazards

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.

## **MATERIAL SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

### **Laminin-411**

Version 1.0

Print Date 02.05.2016

## **SECTION 3: Composition/information on ingredients**

### **3.1 Mixtures**

*Hazardous components*

Remarks : No hazardous ingredients

## **SECTION 4: First aid measures**

### **4.1 Description of first aid measures**

- |                           |  |
|---------------------------|--|
| General advice :          | Do not leave the victim unattended.  |
| If inhaled :              | Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.                 |
| In case of skin contact : | If on skin, rinse well with water.   |
| In case of eye contact :  | Immediately flush eye(s) with plenty of water.<br>Remove contact lenses.<br>Protect unharmed eye.<br>If eye irritation persists, consult a specialist. |
| If swallowed :            | Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.            |

### **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**

None

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

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

### **5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting: No information available

## **MATERIAL SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

### **Laminin-411**

Version 1.0

Print Date 02.05.2016

#### **5.3 Advice for firefighters**

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information :

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**

Personal precautions : Refer to protective measures listed in sections 7 and 8.

#### **6.2 Environmental precautions**

Environmental precautions : No special environmental precautions required.

#### **6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Wipe up with inert absorbent material.

#### **6.4 Reference to other sections**

See section 8 for more information.

## **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

Advice on safe handling : Always wear recommended Personal Protective Equipment. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

#### **7.2 Conditions for safe storage, including any incompatibilities**

## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### Laminin-411

Version 1.0

Print Date 02.05.2016

Requirements for storage areas and containers:

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

### 7.3 Specific end use(s)

Specific use(s) :

For research use only

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

*Personal protective equipment*

Eye protection : Safety glasses

Hand protection Protective gloves

Material Remarks : 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.

Skin and body protection : Wear suitable protective clothing

Respiratory protection : No personal respiratory protective equipment normally required.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### Laminin-4 I I

Version 1.0

Print Date 02.05.2016

Odour :	none
Odour Threshold :	No data available
pH :	6-8
Melting point/range :	No data available
Boiling point/boiling range:	No data available
Flash point :	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper explosion limit:	No data available
Lower explosion limit:	No data available
Vapor pressure:	No data available
Relative vapour density:	No data available
Relative density:	No data available
Density:	1,0325g/cm <sup>3</sup>
Solubility(ies):	completely miscible
Water solubility:	No data available
Partition coefficient: n-octanol/water	No data available
Ignition temperature:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	The substance or mixture is not classified as oxidizing

### 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

## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### Laminin-411

Version 1.0

Print Date 02.05.2016

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

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

Conditions to avoid : No data available

#### 10.5 Incompatible materials

Materials to avoid : No data available

#### 10.6 Hazardous decomposition products

Hazardous decomposition : No data available

## SECTION II: Toxicological information

### 11.1 Information on toxicological effects

#### *Acute toxicity*

Not classified based on available information.

#### *Skin corrosion/irritation*

Not classified based on available information.

#### *Serious eye damage/eye irritation*

Not classified based on available information.

#### *Respiratory or skin sensitisation*

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

#### *Germ cell mutagenicity*

Not classified based on available information.

#### *Carcinogenicity*

Not classified based on available information.

#### *Reproductive toxicity*

Not classified based on available information.

#### *STOT - single exposure*

Not classified based on available information.

#### *STOT - repeated exposure*

## **MATERIAL SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

### **Laminin-411**

Version 1.0

Print Date 02.05.2016

Not classified based on available information.

*Aspiration toxicity*

Not classified based on available information

## **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**

*Product:*

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 Other adverse effects**

No data available

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

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

Contaminated 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**

## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### Laminin-411

Version 1.0

Print Date 02.05.2016

#### 14.1 UN number

Not regulated as a dangerous good

#### 14.2 UN proper shipping name

Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADNR,  
IMDG-Code, ICAO/IATA-DGR

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not applicable

## SECTION 15: Regulatory information

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

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

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants Not applicable

Seveso II – Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances: Not applicable



## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### Laminin-411

Version 1.0

Print Date 02.05.2016

Seveso III – Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accidents hazards involving dangerous substances:

Not applicable

Water contaminating class      Not classified

TA Luft List:

Total dust: Not applicable  
:Inorganic substances in powdered form: Not applicable  
: Inorganic substances in vapour och gaseous form: Not applicable  
: Organic substance: Not applicable  
:Carcinogenic substances: Not applicable  
: Mutagenic: Not applicable  
:Toxic to reproduction: Not applicable

### 15.2 Chemical Safety Assessment

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

## SECTION 16: Other information

### *Further 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.

**MATERIAL SAFETY DATA SHEET**  
according to Regulation (EC) No. 1907/2006  
**Laminin-411**  
Version 1.0

Print Date 02.05.2016