

# Material Safety Data Sheet (MSDS)

## LOABeads™ AffiActive10

### 1. Product and Company Information

Product name  
LOABeads AffiActive10

General use  
Coupling of proteins and peptides. For in-vitro research use only. Not for animal or human use.

Product number  
1300

Chemical family  
Not defined

CAS number  
Not yet assigned

Manufacturer's name and address  
Lab on a Bead AB, Virdings Allé 28, SE-75450 Uppsala, Sweden,

Contact person  
Kristofer Eriksson, Virdings Allé 28, SE-75450 Uppsala, Sweden.  
Telephone: +46 (0)70 4419 330  
E-mail: info@labonabead.se

Product use  
For covalent coupling of proteins and peptides, for subsequent in-vitro isolation of targeted macromolecules through affinity purification. Not for animal or human use.

### 2. Hazards Identification

Classification of the substance

Product definition  
The product is a mixture.

Classification according to regulation (EC) No.1272/2008(CLP/GHS) and 67/548/EEC  
R10, Flammable Liquid 3, H226

Ingredients of unknown toxicity  
No information available, product should be handled with caution.

Ingredients of unknown ecotoxicity  
No information available. Spill to the environment should be prevented.

Ingredients of known ecotoxicity  
Contains ethanol 15-20% which is toxic to aquatic environment.

Classification  
R10, H226

Physical/chemical hazards  
Flammable  
Product may cause sensitization by inhalation and skin contact. May cause adverse effects in the environment.

Label elements

Flammable



Hazard statement

Flammable liquid and vapours

Precautionary statements

Prevention

Wear protective gloves. Wear eye or face protection, use safety glasses with side protection.  
Keep away from heat, sparks, open flames and hot surfaces.

Response

If on skin or hair, take off contaminated clothing. Rinse skin or hair with plenty of water.

Storage

Keep cool

Other hazards which do not result in classification

Not available

Potential health effects

Eyes: May cause irritation to the eyes

Skin: May cause irritation to the skin

Ingestion: No data available

Inhalation: No data available

Effects of acute exposure after ingestion or inhalation

No data available

Effects of chronic exposure

No data available

### 3. Composition/Information on Ingredients

Ingredients/Components

Product/ingredient	Identifiers	%	Classification	
			Regulation 67548/EEC	1272/2008 (CLPGHS)
Ethanol		15-20	Flammable, R10	Flammable liquid, H226
LOABeads AffiActive10		10	Not classified	
Water		70-75	N/A	N/A

CAS Registry Number

Not yet assigned

## 4. First Aid Measures

### Inhalation

Remove exposed subject to fresh air. Seek immediate medical attention if symptoms appear.

### Ingestion

Do not ingest. Seek immediate medical attention if symptoms appear.

### Skin

Wash skin with soap and rinse with plenty of water. Seek medical attention if irritation develops.

### Eyes

Immediately flush eyes with plenty of water. If symptoms as redness or irritation, seek immediate medical attention.

### Protection to first aiders

No action shall be taken involving any personal risk without suitable training.

### Most important symptoms and effects, acute and delayed

### Potential acute health effects

#### Eye contact

No known acute effect

#### Inhalation

No known acute effect

#### Skin contact

No known acute effect

#### Ingestion

No known acute effect

### Over exposure signs

#### Eye contact

No data available

#### Inhalation

No data available

#### Skin contact

No data available

#### Ingestion

No data available

## 5. Fire Fighting Measures

### Extinguishing media

Use dry chemical, CO<sub>2</sub>, water or foam

### Conditions of flammability

#### Flash point

≥23°C

Initial boiling point  
≥60°C

Auto-ignition temperature  
No data available

Hazards from the substance or mixture  
Flammable liquid and vapour

Hazardous combustion products  
Decomposition product may contain the following materials:  
Carbon dioxide  
Carbon monoxide

#### Advice to firefighters

Special precautions for firefighters  
Isolate the fire scene by removing all persons from the vicinity of the incident if there is a fire. No involvement of un-trained personal should take place. Move all containers to a safe area. Use water spray to keep containers cool.

Special protective equipment for fire-fighters  
Fire fighters should wear appropriate protective gowning and self-contained full face breathing apparatus.  
LOABeads AffiActive10 is stable under normal environmental storage conditions.

Explosion data  
LOABeads AffiActive10 is not an explosive.

## 6. Accidental Release Measures

Procedures to be followed in case of a leak or spill  
For small spills of solution, dilute with water and mop up. For large spills, contain and collect spillage by a non-combustible adsorbent and follow national and local regulations for disposal of the spill.  
Avoid spreading the product as much as possible.

## 7. Handling and Storage

Handling procedures  
Put on appropriate protective equipment, do not ingest. Avoid contact with eyes skin and clothing. Avoid breathing vapours and dust. Use only with adequate ventilation. Store and use away from heat, sparks and open fire. Protect from electrostatic discharges.

Storage requirements  
Store cooled and protected from light.

## 8. Exposure Controls/Personal Protection

Personal protective equipment to be used  
Usual protection of all personnel using the product (gloves and eyeglasses).

## 9. Physical and Chemical Properties

Physical state  
LOABeads AffiActive10 is suspension of solids in water-ethanol mixture.

Odour and appearance  
LOABeads AffiActive10 solution has a sweet alcohol odour. It is a suspension of black particles.

Specific gravity  
Approximately 1kg/litre

Vapour pressure  
No data available

Evaporation rate  
No data available

Boiling point  
≈ 70°C

Freezing point/melting point  
No data available

pH  
The pH of the suspension is 7-7.8

## 10. Stability and Reactivity

Conditions under which the product is chemically unstable  
None known

Name of any substance or class of substance with which the product is incompatible  
None known

Conditions of reactivity  
LOABeads AffiActive10 is not reactive

Hazardous decomposition products  
Decomposition products should not be produced at specified storage conditions.

## 11. Toxicological Information

Irritancy  
Repeated contact with skin may cause dryness and cracking of skin.

Sensitization  
No studies have been performed on sensitization.

Carcinogenicity  
No carcinogenicity studies have been conducted.

Reproductive toxicity  
No data available

Teratogenicity  
No studies on teratogenicity have been conducted

Mutagenicity  
No studies on mutagenicity have been performed

Name of toxicologically synergistic products  
None known

## 12. Ecological Information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Ethanol	Acute EC50>100ppm fresh water	Daphnia	48 hours
	Acute LC50 25500 µg/ml marine water	Crustaceans,	48 hours
	Acute LC50 42000 µg/ml fresh water	Fish	4 days
	Chronic NOEC <6.3 g/liter	Daphnia	48 hours
LOABeads AffiActive10	Not studied		

### Degradability

Product/ingredient name	Test	Result
Ethanol	-	100%-Readily-20 days
LOABeads AffiActive10	-	Not tested

## 13. Disposal Considerations

### Waste disposal

Generation of waste should be avoided as much as possible. Avoid spreading waste. Disposal or recycling of waste should be in agreement with Environmental Regulations, local or national. Containers should not be reused but recycled after thorough rinse with water.

Within the present knowledge of Lab on a Bead AB, LOABeads AffiActive10 is not classified as dangerous waste according to the EU directive 91/689/EEG

## 14. Transport Information

### International directives for transportation

#### RID/ADR

Non-hazardous for road transport

#### IMDG

Non-hazardous for sea transport

#### IATA

Non-hazardous for air transport.

According to IATA Special Provision A 58, aqueous solutions containing 24% or less of ethanol is not subject to these regulations.

### Special shipping information

None

## 15. Regulatory Information

This document complies with Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVE 67/548/EEC

INDICATION OF DANGER

R-PHRASES: 10

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVE EC 1272/2008(CLP)

INDICATION OF DANGER

H226

Caution: Product not yet fully tested, use protection as directed in section 7

## 16. Other Information

WARRANTY

The above information is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lab on a Bead AB shall not be held liable for any damage resulting from handling or from contact with the above product.

Copyright 2015-2016 Lab on a Bead AB. License granted to make unlimited paper copies for internal use only.

DISCLAIMER

For R&D use only. Not for drug, household or other uses.