# Safety Data Sheet

according to regulation (EC) No 1907/2006

Product name:Strep-Tactin alkaline phosphatase conjugateVersion:4.1Revision date:01.10.2018



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

## **1.1 Product identifiers**

 Product Name:
 Strep-Tactin® alkaline phosphatase conjugate

Product Number: 2-1503-xxx

## **Registration Number:**

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

# 1.2 Relevant identified uses of the substance or mixture

laboratory chemical

and uses advised against:

No relevant information available.

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

Supplier:	IBA GmbH Rudolf-Wissell-Str. 28 37079 Göttingen Germany	
Telephone:	+49-551-50672- 0	
E-mail:	info@iba-lifesciences.com	

## **1.4 Emergency Telephone Number**

**Emergency Phone:** +49 (0)551/19240 (Poison Information Center Göttingen)

2 Hazards Identification

2.1 Classification of the substance or mixture		
Classification according to Regulation (EC) No 1272/2008 [CLP]		not hazardous
2.2 Label elements		
Labeling according to Regulation (EC) No 1272/2008 [CLP]	n/a	

# 2.3 Other hazards

To the best of our knowledge, the chemical, physical, and toxicological properties of streptavidin and its muteins have not yet been thoroughly investigated.

IBA GmbH therefore recommends treating these products with the care that is due to unknown chemicals.



# 3 Composition/Information on ingredients

# 3.2 Chemical characterization: Mixtures

## Hazardous components according to Regulation (EC) No 1272/2008 [CLP]:

Component	CAS-No	%	Classification acc. to (EC) 1972/2008
Tris	77-86-1	< 0,6 %	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3
			H315, H319, H335
Sodium azide	26628-22-8	< 0,1 %	Acute Tox 2 (oral); Acute Tox. 1 (dermal); STOT RE
			(2); Aquatic Tox. 1; Aquatic Chronic (1)
			H300, H310, H373, H400, H410
Zinc chloride	7646-85-7	< 0,01 %	Acute Tox 4 (oral), Skin Corr. 1B, Aquatic Acute 1,
			Aquatic Chronic 1
			H302, H314, H400, H410

#### Description of product:

Strep-Tactin m2 is a mutein of streptavidin, an extracellular protein of *Streptomyces avidinii* that binds biotin with high affinity.

The product consists of one molecule of alkaline phosphatase (AP) bound to each molecule of Strep-Tactin. The product is dissolved in buffer with a concentration of 0.175 - 0.185 mg/ml.

#### 4 First aid measures

## 4.1 Description of first aid measures

After inhalation:	Provide fresh air. If feeling unwell, consult a physician.
	Wash with plenty of soap and water. If skin irritation occurs, consult a physician.
After eye contact:	Flush eyes with water for at least 10 minutes. If irritation persists, consult a physician.
After ingestion:	Rinse mouth and drink water if conscious. If feeling unwell, consult a physician.

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

No relevant information available.

## 4.3 Indications of any immediate medical attention and special treatment needed

No relevant information available.

## 5 Firefighting measures

## 5.1 Extinguishing media

Suitable extinguishing media CO<sub>2</sub>, dry extinguishing powder, foam, or water spray. Unsuitable extinguishing media

No relevant information available.

# 5.2 Special hazards arising from the substance of mixture

No relevant information available.



# **5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary (see section 5.2).

# 6 Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment. Avoid eye and skin contact.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and material for containment and cleaning up

Take up mechanically. Place in appropriate containers for disposal. Provide suitable ventilation.

## 6.4 Reference to other sections

Information about safe handling: see section 7. Information about protective equipment: see section 8. Information for disposal: see section 13.

# 7 Handling and storage

## 7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Keep containers, equipment, and workplace clean.

## 7.2 Conditions for safe storage, including any incompatibilities

Storage rooms and containers:	No special requirements.
Incompatible substances or mixtures:	Keep away from food and drink.
Consideration of other advice:	Keep containers tightly closed.
Recommended storage temperature:	2 – 8 °C

## 7.3 Specific end use(s)

No relevant information available.

## 8 Exposure controls/personal protection

## 8.1 Control parameters

Components with workplace control parameters: none

## 8.2 Exposure controls

**General precautionary and hygiene measures** The usual precautions for handling chemicals should be observed. Avoid contact with eyes and skin. Wash hands before breaks and after work.



## **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Inspect gloves prior to each use. Choose suitable gloves according to break through time, permeation rate and material degradation.

#### **Glove material**

Nitrile rubber, minimum layer thickness: ≥ 0,11 mm The suitability of gloves depends on several quality characteristic besides the material. It may differ from one supplier to another.

#### Break through time

Break through level: Level  $\geq 6$ 

The exact break through time should be inquired from the supplier and should be observed.

#### Eye protection

Use safety goggles with side protection.

# Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## 9 Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

Appearance:	clear liquid
Odor:	odorless
Odor threshold:	no data available
pH:	8.0
Melting point:	no data available
Freezing point:	no data available
Initial boiling point and boiling range:	no data available
Flash point:	no data available
Evaporation rate:	no data available
Upper/lower explosive limits:	no data available
Vapor pressure:	no data available
Vapor density:	no data available
Relative density:	no data available
Water solubility:	no data available
Partition coefficient (n-octanol/water):	no data available
Viscosity:	no data available
Explosive properties:	not explosive
Oxidizing properties:	not oxidizing



# 9.2 Other safety information

No further relevant information available.

# 10 Stability and reactivity

#### 10.1 Reactivity

See section 10.3

## **10.2** Chemical stability

Stable under recommended storage conditions.

#### **10.3** Possibility of hazardous reactions

Reactions with alkaline and oxidizing substances.

#### 10.4 Conditions to avoid

No relevant information available.

#### **10.5** Incompatible materials

No relevant information available.

## **10.6 Hazardous decomposition products**

No relevant information available.

## **11** Toxicological information

#### 11.1 Information on toxicological effects

#### Acute toxicity

ATE(mix) oral	> 6000 mg/kg
ATE(mix) dermal	> 6000 mg/L

#### Skin corrosion/irritation

Tris (< 0,6 %) and Zinc chloride (< 0,01 %) may cause irritation of skin and mucous membranes.

#### Serious eye damage/eye irritation

No relevant information available.

#### Respiratory or skin sensitization.

No component is classified as a respiratory sensitizer.

#### Germ cell mutagenicity

No component is classified as a mutagenic toxicant.

#### Carcinogenicity

No component is classified as a carcinogenic toxicant.

#### Reproductive toxicity

No component is classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

Tris (<0,6 %) may cause respiratory irritation.

## Specific target organ toxicity - repeated exposure

Sodium azide (< 0,1 %) is classified as a specific target organ toxicant (repeated exposure).



## Aspiration hazard

No component is classified as an aspiration hazard.

# 12 Ecological information

## 12.1 Toxicity

No relevant information available.

# 12.2 Persistence and degradability

No relevant information available.

## 12.3 Bioaccumulative potential

No relevant information available.

## 12.4 Mobility in soil

No relevant information available.

## **12.5** Results of PBT- and vPvB-assessment

No relevant information available.

#### **12.6** Other adverse effects

No relevant information available.

# **13** Disposal considerations

# 13.1 Waste treatment methods

#### **Recommendation for product:**

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

#### **Contaminated packaging:**

Dispose of as unused product.

## **14** Transport information

14.1 UN-Number		
ADR/RID: -	IMDG: -	IATA: -
14.2 UN proper shipping na	ame	
ADR/RID: not dangerous goods	IMDG: not dangerous goods-	IATA: not dangerous goods
14.3 Transport hazard class	s(es)	
ADR/RID: -	IMDG: -	IATA: -
14.4 Packaging group		
ADR/RID: -	IMDG: -	IATA: -
14.5 Environmental hazard	ls	
ADR/RID: no	IMDG: marine pollutant: no	IATA: no
14.6 Special precaution for	user	

No relevant information available.

## 14.7 Transport in bulk according to Annnex II of MARPOL and the IBC code

No relevant information available.



# 15 Regulatory Information

# 15.1 Safety, health and environmental regulation specific for the substance or mixture

# National regulations:

No relevant information available.

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance / mixture.

## **16 Other information**

The above information is based on our present-day knowledge. It does not represent any guarantee of the properties of the product, not guarantee specific properties of the product and shall not establish a legally valid contractual relationship.

# **17 Changes to Version 4.9** (from 01.11.2015)

Concentrations of hazardous components are now given as "<" (less than) rather than "~" (approximately).