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# SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

### 1.1 Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
349023	Streptavidin PE	

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

**Identified uses:** Reserved for industrial and professional use.

**Uses advised against:** Not for use in diagnostic or therapeutic procedures.

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

#### Manufacturer

Becton Dickinson France S.A.S. Belgian  
Branch  
Erembodegem-Dorp 86  
Erembodegem 9320  
Belgium

**Telephone:** 32 2 400 98 95  
**Fax:** 32 2 401 70 94

**Contact Person:** BD Biosciences - Centralized European Office  
Regulatory Compliance Department

**E-mail:** help.biosciences@europe.bd.com

**1.4 Emergency telephone number:** 32 2 400 98 95

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

**Classification according to Regulation (EC) No 1272/2008 as amended.**

Not classified

**2.2 Label Elements** Not applicable

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**2.3 Other hazards** No data available.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
sodium azide	0.1 - <0.25%	26628-22-8	247-852-1	No data available.	No data available.	#

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# This substance has workplace exposure limit(s).

#### Classification

Chemical name	CLP Classification	Notes
sodium azide	Acute Tox.: 2: H300Aquatic Chronic: 1: H410Aquatic Acute: 1: H400	No data available.

Regulation No. 1272/2008.

The full text for all H-statements is displayed in section 16.

### SECTION 4: First aid measures

**General:** Get medical attention if symptoms occur.

#### 4.1 Description of first aid measures

**Inhalation:** Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.

**Skin Contact:** Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

**Ingestion:** Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.



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**4.2 Most important symptoms and effects, both acute and delayed:** No data available.

**4.3 Indication of any immediate medical attention and special treatment needed**

**Hazards:** No data available.

**Treatment:** No data available.

**SECTION 5: Firefighting measures**

**General Fire Hazards:** Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water spray to keep fire-exposed containers cool.

**5.1 Extinguishing media Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Not applicable

**5.2 Special hazards arising from the substance or mixture:** Fire or excessive heat may produce hazardous decomposition products.

**5.3 Advice for firefighters Special fire fighting procedures:** No unusual fire or explosion hazards noted.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures:** Contact local authorities in case of spillage to drain/aquatic environment. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.



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**6.2 Environmental Precautions:** Avoid release to the environment.

**6.3 Methods and material for containment and cleaning up:** Absorb spillage with suitable absorbent material. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.

**6.4 Reference to other sections:** No data available.

**SECTION 7: Handling and storage:**

**7.1 Precautions for safe handling:** When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required.

**7.2 Conditions for safe storage, including any incompatibilities:** Store in a cool, dry place. Keep container tightly closed.

**7.3 Specific end use(s):** Reserved for industrial and professional use. Read label before use.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control Parameters**  
**Occupational Exposure Limits**

Chemical name	Type	Exposure Limit Values	Source
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sodium azide - as NaN <sub>3</sub>	STEL	0.3 mg/m <sup>3</sup>	UK. EH40 Workplace Exposure Limits (WELs) (2007)
	TWA	0.1 mg/m <sup>3</sup>	UK. EH40 Workplace Exposure Limits (WELs) (2007)
sodium azide	TWA	0.1 mg/m <sup>3</sup>	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU (12 2009)
	STEL	0.3 mg/m <sup>3</sup>	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU (12 2009)

### Biological Limit Values

None.

## 8.2 Exposure controls

**Appropriate Engineering Controls:** No special requirements under ordinary conditions of use and with adequate ventilation.

### Individual protection measures, such as personal protective equipment

**General information:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand Protection:** Chemical resistant gloves Suitable gloves can be recommended by the glove supplier. Wash hands after contact.

**Other:** Wear a lab coat or similar protective clothing.

#### Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

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**Hygiene measures:** Observe good industrial hygiene practices.

**Environmental Controls:** No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	No data available.
<b>Color:</b>	No data available.
<b>Odor:</b>	No data available.
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability Limit - Upper (%):</b>	No data available.
<b>Flammability Limit - Lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density (air=1):</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Autoignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>SADT:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.

## SECTION 10: Stability and reactivity

**10.1 Reactivity:** Material is stable under normal conditions.



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- 10.2 Chemical Stability:** Material is stable under normal conditions.
- 10.3 Possibility of hazardous reactions:** Not determined.
- 10.4 Conditions to avoid:** Avoid exposure to high temperatures or direct sunlight.
- 10.5 Incompatible Materials:** Metals. Water reactive material.
- 10.6 Hazardous Decomposition Products:** Stable; however, may decompose if heated.

## SECTION 11: Toxicological information

**General information:** No data on possible toxicity effects have been found.

### Information on likely routes of exposure

- Inhalation:** Limited inhalation hazard at normal work temperatures.
- Ingestion:** No harmful effects expected in amounts likely to be ingested by accident.
- Skin Contact:** Negligible irritation to skin at ambient temperatures.
- Eye contact:** Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Oral

**Product:** ATEmix: 27,000 mg/kg

##### Specified substance(s)

sodium azide LD 50 (Rat): 27 mg/kg

##### Dermal

##### Product:

Not classified for acute toxicity based on available data.

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**Specified substance(s)**

sodium azide                      No data available.

**Inhalation**

**Product:**                                      Not classified for acute toxicity based on available data.

**Specified substance(s)**

sodium azide                      No data available.

**Repeated dose toxicity**

**Product:**

**Specified substance(s)**

sodium azide                      No data available.

**Skin**

**Corrosion/Irritation:**

**Product:**                                      Based on available data, the classification criteria are not met.

**Specified substance(s)**

sodium azide                      Based on available data, the classification criteria are not met.

**Serious Eye  
Damage/Eye**

**Irritation:**

**Product:**                                      Based on available data, the classification criteria are not met.

**Specified substance(s)**

sodium azide                      Based on available data, the classification criteria are not met.

**Respiratory or Skin**

**Sensitization:**

**Product:**                                      Not a skin sensitizer.

**Specified substance(s)**

sodium azide                      Not a skin sensitizer.

**Germ Cell Mutagenicity**

**In vitro**

**Product:**                                      Not applicable

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**Specified substance(s)**

sodium azide                      No data available.

**In vivo**

**Product:**                              Not applicable

**Specified substance(s)**

sodium azide                      No data available.

**Carcinogenicity**

**Product:**                              Based on available data, the classification criteria are not met.

**Specified substance(s)**

sodium azide                      No data available.

**Reproductive toxicity**

**Product:**                              Based on available data, the classification criteria are not met.

**Specified substance(s)**

sodium azide                      No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:**                              Based on available data, the classification criteria are not met.

**Specified substance(s)**

sodium azide                      No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:**                              Based on available data, the classification criteria are not met.

**Specified substance(s)**

sodium azide                      No data available.

**Aspiration Hazard**

**Product:**                              Based on available data, the classification criteria are not met.

**Specified substance(s)**

sodium azide                      No data available.

**Other adverse effects:**      None known.

**SECTION 12: Ecological information**

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## 12.1 Toxicity

### Acute toxicity

#### Fish

**Product:** No negative effects on the aquatic environment are known.

#### Specified substance(s)

sodium azide LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 5.46 mg/l Mortality  
LC 50 (Rainbow trout, donaldson trout (*Oncorhynchus mykiss*), 96 h): 4.6 mg/l (Static) Mortality  
LC 50 (Bluegill (*Lepomis macrochirus*), 96 h): < 3 mg/l Mortality  
LC 50 (Northern squawfish (*Ptychocheilus oregonensis*), 24 h): < 10 mg/l (Static) Mortality  
LC 50 (Trout family (*Salmonidae*), 24 h): < 10 mg/l Mortality

#### Aquatic Invertebrates

**Product:** No negative effects on the aquatic environment are known.

#### Specified substance(s)

sodium azide LC 50 (Mysid (*Acanthomysis costata*), 7 d): 0.149 mg/l (Renewal) Mortality  
LC 50 (Water flea (*Simocephalus serrulatus*), 48 h): 6.4 mg/l  
LC 50 (Water flea (*Daphnia pulex*), 48 h): 4.2 mg/l  
LC 50 (Crayfish (*Orconectes rusticus*), 96 h): < 1 mg/l (Static)  
LC 50 (Red swamp crayfish (*Procambarus clarkii*), 48 h): 0.4 - 0.6 mg/l

### Chronic Toxicity

#### Fish

**Product:** No negative effects on the aquatic environment are known.

#### Specified substance(s)

sodium azide NOEC (Northern squawfish (*Ptychocheilus oregonensis*), 24 h): 5 mg/l  
LC 100 (Northern squawfish (*Ptychocheilus oregonensis*), 24 h): 10 mg/l  
LC 100 (*Oncorhynchus mykiss*, 24 h): 10 mg/l  
LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 5.46 mg/l

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### **Aquatic Invertebrates**

**Product:** No negative effects on the aquatic environment are known.

#### **Specified substance(s)**

sodium azide NOEC (Sea urchin, Echinoderm (*Paracentrotus lividus*), 48 h): < 0.065 mg/l

### **Toxicity to Aquatic Plants**

**Product:** No negative effects on the aquatic environment are known.

#### **Specified substance(s)**

sodium azide EC 50 (Algae (*Pseudokirchneriella subcapitata*), 96 h): 0.35 mg/l  
EC 50 (Green algae (*Chlorococcum*), 24 h): 176 mg/l

## **12.2 Persistence and Degradability**

### **Biodegradation**

**Product:** Expected to be readily biodegradable.

#### **Specified substance(s)**

sodium azide No data available.

### **BOD/COD Ratio**

**Product** No data available.

#### **Specified substance(s)**

sodium azide No data available.

## **12.3 Bioaccumulative potential**

**Product:** No data available.

#### **Specified substance(s)**

sodium azide No data available.

## **12.4 Mobility in soil:**

**Product:** No data available.

#### **Specified substance(s)**

sodium azide No data available.

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

**Product:** No data available.

#### **Specified substance(s)**

sodium azide No data available.

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**12.6 Other adverse effects:** The product is not expected to be hazardous to the environment.

### **SECTION 13: Disposal considerations**

#### **13.1 Waste treatment methods**

**General information:** Dispose of waste and residues in accordance with local authority requirements.

**Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### **SECTION 14: Transport information**

#### **ADR**

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
Hazard No. (ADR):	Not regulated.
Tunnel restriction code:	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
Marine Pollutant:	Not regulated.
14.6 Special precautions for user:	Not regulated.

#### **ADN**

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
Hazard No. (ADR):	Not regulated.
Tunnel restriction code:	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
Marine Pollutant:	Not regulated.



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14.6 Special precautions for user: Not regulated.

**RID**

14.1 UN Number: Not regulated.  
14.2 UN Proper Shipping Name: Not regulated.  
14.3 Transport Hazard Class(es)  
Class: Not regulated.  
Label(s): Not regulated.  
14.4 Packing Group: Not regulated.  
14.5 Environmental Hazards:  
Marine Pollutant: Not regulated.  
14.6 Special precautions for user: Not regulated.

**IMDG**

14.1 UN Number: Not regulated.  
14.2 UN Proper Shipping Name: Not regulated.  
14.3 Transport Hazard Class(es)  
Class: Not regulated.  
Label(s): Not regulated.  
EmS No.: Not regulated.  
14.4 Packing Group: Not regulated.  
14.5 Environmental Hazards:  
Marine Pollutant: Not regulated.  
14.6 Special precautions for user: Not regulated.

**IATA**

14.1 UN Number: Not regulated.  
14.2 Proper Shipping Name: Not regulated.  
14.3 Transport Hazard Class(es):  
Class: Not regulated.  
Label(s): Not regulated.  
14.4 Packing Group: Not regulated.  
14.5 Environmental Hazards: Not regulated.

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Marine Pollutant: Not regulated.  
14.6 Special precautions for user: Not regulated.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** Not applicable

## SECTION 15: Regulatory information

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

#### EU Regulations

**Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer:** none

**Regulation (EC) No. 850/2004 on persistent organic pollutants:** none

**Regulation (EC) No. 689/2008 Import and export of dangerous chemicals:** none

**EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):** none

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:** none

**Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:** none

**Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.:** none

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.:** none

**Directive 96/82/EC (Seveso III): on the control of major accident hazards involving dangerous substances:** none

**EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:** none



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**Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:** none

**15.2 Chemical safety assessment:** No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information**

**Revision Information:**

**References**

PBT PBT: persistent, bioaccumulative and toxic substance.  
vPvB vPvB: very persistent and very bioaccumulative substance.

**Key literature references and sources for data:** European Chemicals Agency (ECHA): Information on Chemicals.

**Wording of the H-statements in section 2 and 3**

H300 Fatal if swallowed.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**Training information:** No data available.

**Issue Date:** 29.06.2018  
**SDS No.:** UN0000000000000349023-1157-1-01  
**Disclaimer:**

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