

SAFETY DATA SHEET



VariFlex Bacterial Protein Expression System, Part Number 240165

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

1.1 Product identifier

Product name	: VariFlex Bacterial Protein Expression System, Part Number 240165
Part no. (chemical kit)	: 240165
Part no.	: Streptavidin Resin 240105-51
	pBEn-SBP-SET1a Vector 240164-51
	pBEn-SBP-SET1b Vector 240164-52
	pBEn-SBP-SET1c 240164-53
	pBEn-SBP-SET2a Vector 240164-54
	pBEn-SBP-SET2b 240164-55
	pBEn-SBP-SET2c 240164-56
	pBEn-SBP-SET3a Vector 240164-57
	pBEn-SBP-SET3b Vector 240164-58
	pBEn-SBP-SET3c 240164-59

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

Material uses	: Analytical reagent.
	Streptavidin Resin 1.25 ml
	pBEn-SBP-SET1a Vector 0.02 ml
	pBEn-SBP-SET1b Vector 0.02 ml (20 µg 1 µg/µl)
	pBEn-SBP-SET1c 0.02 ml (20 µg 1 µg/µl)
	pBEn-SBP-SET2a Vector 0.02 ml
	pBEn-SBP-SET2b 0.02 ml (20 µg 1 µg/µl)
	pBEn-SBP-SET2c 0.02 ml (20 µg 1 µg/µl)
	pBEn-SBP-SET3a Vector 0.02 ml (20 µg 1 µg/µl)
	pBEn-SBP-SET3b Vector 0.02 ml (20 µg 1 µg/µl)
	pBEn-SBP-SET3c 0.02 ml (20 µg 1 µg/µl)

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000  
e-mail address of person responsible for this SDS : pdl-msds\_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	: Streptavidin Resin Mixture
	pBEn-SBP-SET1a Vector Mixture
	pBEn-SBP-SET1b Vector Mixture
	pBEn-SBP-SET1c Mixture
	pBEn-SBP-SET2a Vector Mixture
	pBEn-SBP-SET2b Mixture
	pBEn-SBP-SET2c Mixture

## SECTION 2: Hazards identification

pBEn-SBP-SET3a Vector Mixture  
pBEn-SBP-SET3b Vector Mixture  
pBEn-SBP-SET3c Mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

#### Streptavidin Resin

H226

FLAMMABLE LIQUIDS - Category 3

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** : Streptavidin Resin



**Signal word** : Streptavidin Resin Warning  
pBEn-SBP-SET1a Vector No signal word.  
pBEn-SBP-SET1b Vector No signal word.  
pBEn-SBP-SET1c No signal word.  
pBEn-SBP-SET2a Vector No signal word.  
pBEn-SBP-SET2b No signal word.  
pBEn-SBP-SET2c No signal word.  
pBEn-SBP-SET3a Vector No signal word.  
pBEn-SBP-SET3b Vector No signal word.  
pBEn-SBP-SET3c No signal word.

**Hazard statements** : Streptavidin Resin H226 - Flammable liquid and vapour.  
pBEn-SBP-SET1a Vector No known significant effects or critical hazards.  
pBEn-SBP-SET1b Vector No known significant effects or critical hazards.  
pBEn-SBP-SET1c No known significant effects or critical hazards.  
pBEn-SBP-SET2a Vector No known significant effects or critical hazards.  
pBEn-SBP-SET2b No known significant effects or critical hazards.  
pBEn-SBP-SET2c No known significant effects or critical hazards.  
pBEn-SBP-SET3a Vector No known significant effects or critical hazards.  
pBEn-SBP-SET3b Vector No known significant effects or critical hazards.  
pBEn-SBP-SET3c No known significant effects or critical hazards.

### Precautionary statements

**Prevention** : Streptavidin Resin P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
pBEn-SBP-SET1a Vector Not applicable.  
pBEn-SBP-SET1b Vector Not applicable.  
pBEn-SBP-SET1c Not applicable.  
pBEn-SBP-SET2a Vector Not applicable.  
pBEn-SBP-SET2b Not applicable.  
pBEn-SBP-SET2c Not applicable.  
pBEn-SBP-SET3a Vector Not applicable.  
pBEn-SBP-SET3b Vector Not applicable.  
pBEn-SBP-SET3c Not applicable.

**Response** : Streptavidin Resin P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
pBEn-SBP-SET1a Vector Not applicable.  
pBEn-SBP-SET1b Vector Not applicable.  
pBEn-SBP-SET1c Not applicable.  
pBEn-SBP-SET2a Vector Not applicable.  
pBEn-SBP-SET2b Not applicable.  
pBEn-SBP-SET2c Not applicable.

## SECTION 2: Hazards identification

	pBEn-SBP-SET3a Vector	Not applicable.
	pBEn-SBP-SET3b Vector	Not applicable.
	pBEn-SBP-SET3c	Not applicable.
<b>Storage</b>	: Streptavidin Resin	Not applicable.
	pBEn-SBP-SET1a Vector	Not applicable.
	pBEn-SBP-SET1b Vector	Not applicable.
	pBEn-SBP-SET1c	Not applicable.
	pBEn-SBP-SET2a Vector	Not applicable.
	pBEn-SBP-SET2b	Not applicable.
	pBEn-SBP-SET2c	Not applicable.
	pBEn-SBP-SET3a Vector	Not applicable.
	pBEn-SBP-SET3b Vector	Not applicable.
	pBEn-SBP-SET3c	Not applicable.
<b>Disposal</b>	: Streptavidin Resin	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	pBEn-SBP-SET1a Vector	Not applicable.
	pBEn-SBP-SET1b Vector	Not applicable.
	pBEn-SBP-SET1c	Not applicable.
	pBEn-SBP-SET2a Vector	Not applicable.
	pBEn-SBP-SET2b	Not applicable.
	pBEn-SBP-SET2c	Not applicable.
	pBEn-SBP-SET3a Vector	Not applicable.
	pBEn-SBP-SET3b Vector	Not applicable.
	pBEn-SBP-SET3c	Not applicable.
<b>Supplemental label elements</b>	: Streptavidin Resin	Not applicable.
	pBEn-SBP-SET1a Vector	Not applicable.
	pBEn-SBP-SET1b Vector	Not applicable.
	pBEn-SBP-SET1c	Not applicable.
	pBEn-SBP-SET2a Vector	Not applicable.
	pBEn-SBP-SET2b	Not applicable.
	pBEn-SBP-SET2c	Not applicable.
	pBEn-SBP-SET3a Vector	Not applicable.
	pBEn-SBP-SET3b Vector	Not applicable.
	pBEn-SBP-SET3c	Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Streptavidin Resin	Not applicable.
	pBEn-SBP-SET1a Vector	Not applicable.
	pBEn-SBP-SET1b Vector	Not applicable.
	pBEn-SBP-SET1c	Not applicable.
	pBEn-SBP-SET2a Vector	Not applicable.
	pBEn-SBP-SET2b	Not applicable.
	pBEn-SBP-SET2c	Not applicable.
	pBEn-SBP-SET3a Vector	Not applicable.
	pBEn-SBP-SET3b Vector	Not applicable.
	pBEn-SBP-SET3c	Not applicable.
<b>Special packaging requirements</b>		
<b>Tactile warning of danger</b>	: Streptavidin Resin	Not applicable.
	pBEn-SBP-SET1a Vector	Not applicable.
	pBEn-SBP-SET1b Vector	Not applicable.
	pBEn-SBP-SET1c	Not applicable.
	pBEn-SBP-SET2a Vector	Not applicable.
	pBEn-SBP-SET2b	Not applicable.
	pBEn-SBP-SET2c	Not applicable.
	pBEn-SBP-SET3a Vector	Not applicable.
	pBEn-SBP-SET3b Vector	Not applicable.
	pBEn-SBP-SET3c	Not applicable.

### 2.3 Other hazards

**VariFlex Bacterial Protein Expression System, Part Number 240165**

## SECTION 2: Hazards identification

<b>Other hazards which do not result in classification</b>	<b>Other hazards which do not result in classification</b>	Streptavidin Resin	None known.
		pBEn-SBP-SET1a Vector	None known.
		pBEn-SBP-SET1b Vector	None known.
		pBEn-SBP-SET1c	None known.
		pBEn-SBP-SET2a Vector	None known.
		pBEn-SBP-SET2b	None known.
		pBEn-SBP-SET2c	None known.
		pBEn-SBP-SET3a Vector	None known.
		pBEn-SBP-SET3b Vector	None known.
		pBEn-SBP-SET3c	None known.

## SECTION 3: Composition/information on ingredients

<b>3.1 Substances</b>	<b>:</b>	Streptavidin Resin	Mixture
		pBEn-SBP-SET1a Vector	Mixture
		pBEn-SBP-SET1b Vector	Mixture
		pBEn-SBP-SET1c	Mixture
		pBEn-SBP-SET2a Vector	Mixture
		pBEn-SBP-SET2b	Mixture
		pBEn-SBP-SET2c	Mixture
		pBEn-SBP-SET3a Vector	Mixture
		pBEn-SBP-SET3b Vector	Mixture
		pBEn-SBP-SET3c	Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Streptavidin Resin Ethanol	EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≥10 - ≤25	Flam. Liq. 2, H225  <b>See Section 16 for the full text of the H statements declared above.</b>	[2]

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Eye contact</b>	<b>:</b>	Streptavidin Resin	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
		pBEn-SBP-SET1a Vector	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		pBEn-SBP-SET1b Vector	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		pBEn-SBP-SET1c	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		pBEn-SBP-SET2a Vector	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		pBEn-SBP-SET2b	Immediately flush eyes with plenty of water, occasionally

## SECTION 4: First aid measures

### Inhalation

: Streptavidin Resin

lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

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Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

### Skin contact

: Streptavidin Resin

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

## SECTION 4: First aid measures

### Ingestion

pBEn-SBP-SET1c	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
pBEn-SBP-SET2a Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
pBEn-SBP-SET2b	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
pBEn-SBP-SET2c	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
pBEn-SBP-SET3a Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
pBEn-SBP-SET3b Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
pBEn-SBP-SET3c	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
: Streptavidin Resin	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
pBEn-SBP-SET1a Vector	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
pBEn-SBP-SET1b Vector	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
pBEn-SBP-SET1c	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
pBEn-SBP-SET2a Vector	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
pBEn-SBP-SET2b	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is



## SECTION 4: First aid measures

		conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	pBEn-SBP-SET2c	conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	pBEn-SBP-SET3a Vector	conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	pBEn-SBP-SET3b Vector	conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	pBEn-SBP-SET3c	conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
<b>Protection of first-aiders</b>	: Streptavidin Resin	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	pBEn-SBP-SET1a Vector	No action shall be taken involving any personal risk or without suitable training.
	pBEn-SBP-SET1b Vector	No action shall be taken involving any personal risk or without suitable training.
	pBEn-SBP-SET1c	No action shall be taken involving any personal risk or without suitable training.
	pBEn-SBP-SET2a Vector	No action shall be taken involving any personal risk or without suitable training.
	pBEn-SBP-SET2b	No action shall be taken involving any personal risk or without suitable training.
	pBEn-SBP-SET2c	No action shall be taken involving any personal risk or without suitable training.
	pBEn-SBP-SET3a Vector	No action shall be taken involving any personal risk or without suitable training.
	pBEn-SBP-SET3b Vector	No action shall be taken involving any personal risk or without suitable training.
	pBEn-SBP-SET3c	No action shall be taken involving any personal risk or without suitable training.

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

#### Potential acute health effects

<b>Eye contact</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.

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	pBEn-SBP-SET3c	No known significant effects or critical hazards.
<b>Inhalation</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.
<b>Skin contact</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.
<b>Ingestion</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.

### Over-exposure signs/symptoms

<b>Eye contact</b>	: Streptavidin Resin	No specific data.
	pBEn-SBP-SET1a Vector	No specific data.
	pBEn-SBP-SET1b Vector	No specific data.
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a Vector	No specific data.
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.
	pBEn-SBP-SET3a Vector	No specific data.
	pBEn-SBP-SET3b Vector	No specific data.
	pBEn-SBP-SET3c	No specific data.
<b>Inhalation</b>	: Streptavidin Resin	No specific data.
	pBEn-SBP-SET1a Vector	No specific data.
	pBEn-SBP-SET1b Vector	No specific data.
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a Vector	No specific data.
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.
	pBEn-SBP-SET3a Vector	No specific data.
	pBEn-SBP-SET3b Vector	No specific data.
	pBEn-SBP-SET3c	No specific data.
<b>Skin contact</b>	: Streptavidin Resin	No specific data.
	pBEn-SBP-SET1a Vector	No specific data.
	pBEn-SBP-SET1b Vector	No specific data.
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a Vector	No specific data.
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.



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<b>Ingestion</b>	:	pBEn-SBP-SET3a Vector	No specific data.
		pBEn-SBP-SET3b Vector	No specific data.
		pBEn-SBP-SET3c	No specific data.
		Streptavidin Resin	No specific data.
		pBEn-SBP-SET1a Vector	No specific data.
		pBEn-SBP-SET1b Vector	No specific data.
		pBEn-SBP-SET1c	No specific data.
		pBEn-SBP-SET2a Vector	No specific data.
		pBEn-SBP-SET2b	No specific data.
		pBEn-SBP-SET2c	No specific data.
		pBEn-SBP-SET3a Vector	No specific data.
		pBEn-SBP-SET3b Vector	No specific data.
		pBEn-SBP-SET3c	No specific data.

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

<b>Notes to physician</b>	:	Streptavidin Resin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET1a Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET1b Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET1c	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET2a Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET2b	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET2c	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET3a Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET3b Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		pBEn-SBP-SET3c	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
<b>Specific treatments</b>	:	Streptavidin Resin	No specific treatment.
		pBEn-SBP-SET1a Vector	No specific treatment.
		pBEn-SBP-SET1b Vector	No specific treatment.
		pBEn-SBP-SET1c	No specific treatment.
		pBEn-SBP-SET2a Vector	No specific treatment.
		pBEn-SBP-SET2b	No specific treatment.
		pBEn-SBP-SET2c	No specific treatment.
		pBEn-SBP-SET3a Vector	No specific treatment.
		pBEn-SBP-SET3b Vector	No specific treatment.
		pBEn-SBP-SET3c	No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	:	Streptavidin Resin	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
		pBEn-SBP-SET1a Vector	Use an extinguishing agent suitable for the surrounding fire.
		pBEn-SBP-SET1b Vector	Use an extinguishing agent suitable for the surrounding fire.
		pBEn-SBP-SET1c	Use an extinguishing agent suitable for the surrounding fire.
		pBEn-SBP-SET2a Vector	Use an extinguishing agent suitable for the surrounding fire.
		pBEn-SBP-SET2b	Use an extinguishing agent suitable for the surrounding fire.
		pBEn-SBP-SET2c	Use an extinguishing agent suitable for the surrounding fire.
		pBEn-SBP-SET3a	Use an extinguishing agent suitable for the surrounding fire.

## SECTION 5: Firefighting measures

<b>Unsuitable extinguishing media</b>	Vector	
	pBEn-SBP-SET3b	Use an extinguishing agent suitable for the surrounding fire.
	Vector	
	pBEn-SBP-SET3c	Use an extinguishing agent suitable for the surrounding fire.
	Streptavidin Resin	Do not use water jet.
	pBEn-SBP-SET1a	None known.
	Vector	
	pBEn-SBP-SET1b	None known.
	Vector	
	pBEn-SBP-SET1c	None known.
	pBEn-SBP-SET2a	None known.
	Vector	
	pBEn-SBP-SET2b	None known.
	pBEn-SBP-SET2c	None known.
	pBEn-SBP-SET3a	None known.

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

<b>Hazards from the substance or mixture</b>	Streptavidin Resin	Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
	pBEn-SBP-SET1a	In a fire or if heated, a pressure increase will occur and the container may burst.
	Vector	
	pBEn-SBP-SET1b	In a fire or if heated, a pressure increase will occur and the container may burst.
	Vector	
	pBEn-SBP-SET1c	In a fire or if heated, a pressure increase will occur and the container may burst.
	pBEn-SBP-SET2a	In a fire or if heated, a pressure increase will occur and the container may burst.
	Vector	
	pBEn-SBP-SET2b	In a fire or if heated, a pressure increase will occur and the container may burst.
	pBEn-SBP-SET2c	In a fire or if heated, a pressure increase will occur and the container may burst.
	pBEn-SBP-SET3a	In a fire or if heated, a pressure increase will occur and the container may burst.
	Vector	
	pBEn-SBP-SET3b	In a fire or if heated, a pressure increase will occur and the container may burst.
	Vector	
	pBEn-SBP-SET3c	In a fire or if heated, a pressure increase will occur and the container may burst.

<b>Hazardous combustion products</b>	Streptavidin Resin	Decomposition products may include the following materials: carbon dioxide carbon monoxide No specific data.
	pBEn-SBP-SET1a	
	Vector	
	pBEn-SBP-SET1b	No specific data.
	Vector	
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a	No specific data.
	Vector	
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.
	pBEn-SBP-SET3a	No specific data.
	Vector	
	pBEn-SBP-SET3b	No specific data.
	Vector	
	pBEn-SBP-SET3c	No specific data.

## SECTION 5: Firefighting measures

### 5.3 Advice for firefighters

### Special precautions for fire-fighters

- Streptavidin Resin

pBEn-SBP-SET1a  
Vector

pBEn-SBP-SET1b  
Vector

pBEn-SBP-SET1c

pBEn-SBP-SET2a  
Vector

pBEn-SBP-SET2b

pBEn-SBP-SET2c

pBEn-SBP-SET3a  
Vector

pBEn-SBP-SET3b  
Vector

pBEn-SBP-SET3c

## Special protective equipment for fire-fighters

- : Streptavidin Resin

pBEn-SBP-SET1a  
Vector

pBEn-SBP-SET1b  
Vector

pBEn-SBP-SET1c

pBEn-SBP-SET2a  
Vector

[illegible]

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for

## SECTION 5: Firefighting measures

pBEn-SBP-SET2b	fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
pBEn-SBP-SET2c	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
pBEn-SBP-SET3a Vector	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
pBEn-SBP-SET3b Vector	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
pBEn-SBP-SET3c	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: Streptavidin Resin	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
pBEn-SBP-SET1a Vector		No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
pBEn-SBP-SET1b Vector		No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
pBEn-SBP-SET1c		No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
pBEn-SBP-SET2a Vector		No action shall be taken involving any personal risk or

## SECTION 6: Accidental release measures

		without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	pBEn-SBP-SET2b	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	pBEn-SBP-SET2c	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	pBEn-SBP-SET3a Vector	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	pBEn-SBP-SET3b Vector	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	pBEn-SBP-SET3c	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders	: Streptavidin Resin	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET1a Vector	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET1b Vector	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET1c	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET2a Vector	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET2b	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET2c	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET3a Vector	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET3b Vector	If specialised clothing is required to deal with the spillage,



## SECTION 6: Accidental release measures

### 6.2 Environmental precautions

		take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pBEn-SBP-SET3c	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	: Streptavidin Resin	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET1a Vector	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET1b Vector	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET1c	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET2a Vector	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET2b	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET2c	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET3a Vector	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET3b Vector	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	pBEn-SBP-SET3c	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

Methods for cleaning up	: Streptavidin Resin	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	pBEn-SBP-SET1a Vector	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## SECTION 6: Accidental release measures

pBEn-SBP-SET1b Vector	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
pBEn-SBP-SET1c	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
pBEn-SBP-SET2a Vector	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
pBEn-SBP-SET2b	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
pBEn-SBP-SET2c	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
pBEn-SBP-SET3a Vector	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
pBEn-SBP-SET3b Vector	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
pBEn-SBP-SET3c	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: Streptavidin Resin	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain
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## SECTION 7: Handling and storage

### Advice on general occupational hygiene

		product residue and can be hazardous. Do not reuse container.
	pBEn-SBP-SET1a Vector	Put on appropriate personal protective equipment (see Section 8).
	pBEn-SBP-SET1b Vector	Put on appropriate personal protective equipment (see Section 8).
	pBEn-SBP-SET1c	Put on appropriate personal protective equipment (see Section 8).
	pBEn-SBP-SET2a Vector	Put on appropriate personal protective equipment (see Section 8).
	pBEn-SBP-SET2b	Put on appropriate personal protective equipment (see Section 8).
	pBEn-SBP-SET2c	Put on appropriate personal protective equipment (see Section 8).
	pBEn-SBP-SET3a Vector	Put on appropriate personal protective equipment (see Section 8).
	pBEn-SBP-SET3b Vector	Put on appropriate personal protective equipment (see Section 8).
	pBEn-SBP-SET3c	Put on appropriate personal protective equipment (see Section 8).
	: Streptavidin Resin	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	pBEn-SBP-SET1a Vector	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	pBEn-SBP-SET1b Vector	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	pBEn-SBP-SET1c	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	pBEn-SBP-SET2a Vector	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	pBEn-SBP-SET2b	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	pBEn-SBP-SET2c	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## SECTION 7: Handling and storage

pBEn-SBP-SET3a Vector	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
pBEn-SBP-SET3b Vector	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
pBEn-SBP-SET3c	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

#### Storage

: Streptavidin Resin	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
pBEn-SBP-SET1a Vector	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
pBEn-SBP-SET1b Vector	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
pBEn-SBP-SET1c	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials

## SECTION 7: Handling and storage

pBEn-SBP-SET2a Vector	<p>before handling or use.</p> <p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
pBEn-SBP-SET2b	<p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
pBEn-SBP-SET2c	<p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
pBEn-SBP-SET3a Vector	<p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
pBEn-SBP-SET3b Vector	<p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
pBEn-SBP-SET3c	<p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>

### Danger criteria



**VariFlex Bacterial Protein Expression System, Part Number 240165**

## SECTION 7: Handling and storage

Category	Notification and MAPP threshold	Safety report threshold
Streptavidin Resin P5c	5000	50000

### 7.3 Specific end use(s)

<b>Recommendations</b>	: Streptavidin Resin	Industrial applications, Professional applications.
	pBEn-SBP-SET1a Vector	Industrial applications, Professional applications.
	pBEn-SBP-SET1b Vector	Industrial applications, Professional applications.
	pBEn-SBP-SET1c	Industrial applications, Professional applications.
	pBEn-SBP-SET2a Vector	Industrial applications, Professional applications.
	pBEn-SBP-SET2b	Industrial applications, Professional applications.
	pBEn-SBP-SET2c	Industrial applications, Professional applications.
	pBEn-SBP-SET3a Vector	Industrial applications, Professional applications.
	pBEn-SBP-SET3b Vector	Industrial applications, Professional applications.
	pBEn-SBP-SET3c	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: Streptavidin Resin	Not applicable.
	pBEn-SBP-SET1a Vector	Not applicable.
	pBEn-SBP-SET1b Vector	Not applicable.
	pBEn-SBP-SET1c	Not applicable.
	pBEn-SBP-SET2a Vector	Not applicable.
	pBEn-SBP-SET2b	Not applicable.
	pBEn-SBP-SET2c	Not applicable.
	pBEn-SBP-SET3a Vector	Not applicable.
	pBEn-SBP-SET3b Vector	Not applicable.
	pBEn-SBP-SET3c	Not applicable.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
Streptavidin Resin Ethanol	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 1000 ppm 8 hours. TWA: 1920 mg/m <sup>3</sup> 8 hours.

<b>Recommended monitoring procedures</b>	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
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#### DNELs/DMELs

No DNELs/DMELs available.

#### PNECs

No PNECs available

### 8.2 Exposure controls

## SECTION 8: Exposure controls/personal protection

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Streptavidin Resin	Liquid.
	pBEn-SBP-SET1a	Liquid.
	Vector	
	pBEn-SBP-SET1b	Liquid.
	Vector	
	pBEn-SBP-SET1c	Liquid.
	pBEn-SBP-SET2a	Liquid.
	Vector	
	pBEn-SBP-SET2b	Liquid.
	pBEn-SBP-SET2c	Liquid.
	pBEn-SBP-SET3a	Liquid.
	Vector	
	pBEn-SBP-SET3b	Liquid.
	Vector	
	pBEn-SBP-SET3c	Liquid.

<b>Colour</b>	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	

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**SECTION 9: Physical and chemical properties**

<b>Odour</b>		pBEn-SBP-SET2b	Not available.
		pBEn-SBP-SET2c	Not available.
		pBEn-SBP-SET3a	Not available.
		Vector	
		pBEn-SBP-SET3b	Not available.
		Vector	
		pBEn-SBP-SET3c	Not available.
	:	Streptavidin Resin	Not available.
		pBEn-SBP-SET1a	Not available.
		Vector	
		pBEn-SBP-SET1b	Not available.
		Vector	
		pBEn-SBP-SET1c	Not available.
		pBEn-SBP-SET2a	Not available.
		Vector	
<b>Odour threshold</b>		pBEn-SBP-SET2b	Not available.
		pBEn-SBP-SET2c	Not available.
		pBEn-SBP-SET3a	Not available.
		Vector	
		pBEn-SBP-SET3b	Not available.
		Vector	
		pBEn-SBP-SET3c	Not available.
	:	Streptavidin Resin	Not available.
		pBEn-SBP-SET1a	Not available.
		Vector	
		pBEn-SBP-SET1b	Not available.
		Vector	
		pBEn-SBP-SET1c	Not available.
		pBEn-SBP-SET2a	Not available.
		Vector	
		pBEn-SBP-SET2b	Not available.
		pBEn-SBP-SET2c	Not available.
		pBEn-SBP-SET3a	Not available.
		Vector	
		pBEn-SBP-SET3b	Not available.
		Vector	
		pBEn-SBP-SET3c	Not available.
<b>pH</b>	:	Streptavidin Resin	7.5
		pBEn-SBP-SET1a	7.5
		Vector	
		pBEn-SBP-SET1b	7.5
		Vector	
		pBEn-SBP-SET1c	7.5
		pBEn-SBP-SET2a	7.5
		Vector	
		pBEn-SBP-SET2b	7.5
		pBEn-SBP-SET2c	7.5
		pBEn-SBP-SET3a	7.5
		Vector	
		pBEn-SBP-SET3b	7.5
		Vector	
		pBEn-SBP-SET3c	7.5
<b>Melting point/freezing point</b>	:	Streptavidin Resin	Not available.
		pBEn-SBP-SET1a	0°C
		Vector	
		pBEn-SBP-SET1b	0°C
		Vector	
		pBEn-SBP-SET1c	0°C
		pBEn-SBP-SET2a	0°C
		Vector	
		pBEn-SBP-SET2b	0°C

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**SECTION 9: Physical and chemical properties**

<b>Initial boiling point and boiling range</b>	pBEn-SBP-SET2c	0°C
	pBEn-SBP-SET3a	0°C
	Vector	
	pBEn-SBP-SET3b	0°C
	Vector	
	pBEn-SBP-SET3c	0°C
	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	100°C
	Vector	
	pBEn-SBP-SET1b	100°C
	Vector	
	pBEn-SBP-SET1c	100°C
	pBEn-SBP-SET2a	100°C
	Vector	
	pBEn-SBP-SET2b	100°C
<b>Flash point</b>	pBEn-SBP-SET2c	100°C
	pBEn-SBP-SET3a	100°C
	Vector	
	pBEn-SBP-SET3b	100°C
	Vector	
	pBEn-SBP-SET3c	100°C
	: Streptavidin Resin	Closed cup: 37.8 to 61°C
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
<b>Evaporation rate</b>	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
<b>Flammability (solid, gas)</b>	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
	: Streptavidin Resin	Not applicable.
	pBEn-SBP-SET1a	Not applicable.
	Vector	
	pBEn-SBP-SET1b	Not applicable.
	Vector	
	pBEn-SBP-SET1c	Not applicable.
	pBEn-SBP-SET2a	Not applicable.
	Vector	
	pBEn-SBP-SET2b	Not applicable.

## SECTION 9: Physical and chemical properties

	pBEn-SBP-SET2c	Not applicable.
	pBEn-SBP-SET3a	Not applicable.
	Vector	
	pBEn-SBP-SET3b	Not applicable.
	Vector	
	pBEn-SBP-SET3c	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
<b>Vapour pressure</b>	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
<b>Vapour density</b>	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
<b>Relative density</b>	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.



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**SECTION 9: Physical and chemical properties**

	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
<b>Solubility(ies)</b>	: Streptavidin Resin	Soluble in the following materials: cold water and hot water.
	pBEn-SBP-SET1a	Easily soluble in the following materials: cold water and hot water.
	Vector	
	pBEn-SBP-SET1b	Easily soluble in the following materials: cold water and hot water.
	Vector	
	pBEn-SBP-SET1c	Easily soluble in the following materials: cold water and hot water.
	pBEn-SBP-SET2a	Easily soluble in the following materials: cold water and hot water.
	Vector	
	pBEn-SBP-SET2b	Easily soluble in the following materials: cold water and hot water.
	pBEn-SBP-SET2c	Easily soluble in the following materials: cold water and hot water.
	pBEn-SBP-SET3a	Easily soluble in the following materials: cold water and hot water.
	Vector	
	pBEn-SBP-SET3b	Easily soluble in the following materials: cold water and hot water.
	Vector	
	pBEn-SBP-SET3c	Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
<b>Auto-ignition temperature</b>	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.

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**SECTION 9: Physical and chemical properties**

<b>Decomposition temperature</b>	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
	pBEn-SBP-SET2c	Not available.
<b>Viscosity</b>	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
<b>Explosive properties</b>	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
<b>Oxidising properties</b>	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.
	: Streptavidin Resin	Not available.
	pBEn-SBP-SET1a	Not available.
	Vector	
	pBEn-SBP-SET1b	Not available.
	Vector	
	pBEn-SBP-SET1c	Not available.
	pBEn-SBP-SET2a	Not available.
	Vector	
	pBEn-SBP-SET2b	Not available.
	pBEn-SBP-SET2c	Not available.
	pBEn-SBP-SET3a	Not available.
	Vector	
	pBEn-SBP-SET3b	Not available.
	Vector	
	pBEn-SBP-SET3c	Not available.

## SECTION 9: Physical and chemical properties

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

: Streptavidin Resin	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET1a Vector	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET1b Vector	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET1c	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET2a Vector	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET2b	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET2c	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET3a Vector	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET3b Vector	No specific test data related to reactivity available for this product or its ingredients.
pBEn-SBP-SET3c	No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

: Streptavidin Resin	The product is stable.
pBEn-SBP-SET1a Vector	The product is stable.
pBEn-SBP-SET1b Vector	The product is stable.
pBEn-SBP-SET1c	The product is stable.
pBEn-SBP-SET2a Vector	The product is stable.
pBEn-SBP-SET2b	The product is stable.
pBEn-SBP-SET2c	The product is stable.
pBEn-SBP-SET3a Vector	The product is stable.
pBEn-SBP-SET3b Vector	The product is stable.
pBEn-SBP-SET3c	The product is stable.

### 10.3 Possibility of hazardous reactions

: Streptavidin Resin	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET1a Vector	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET1b Vector	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET1c	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET2a Vector	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET2b	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET2c	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET3a Vector	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET3b Vector	Under normal conditions of storage and use, hazardous reactions will not occur.
pBEn-SBP-SET3c	Under normal conditions of storage and use, hazardous reactions will not occur.

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## SECTION 10: Stability and reactivity

<b>10.4 Conditions to avoid</b>	<b>:</b> Streptavidin Resin	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
	pBEn-SBP-SET1a Vector	No specific data.
	pBEn-SBP-SET1b Vector	No specific data.
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a Vector	No specific data.
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.
	pBEn-SBP-SET3a Vector	No specific data.
	pBEn-SBP-SET3b Vector	No specific data.
	pBEn-SBP-SET3c	No specific data.
<b>10.5 Incompatible materials</b>	<b>:</b> Streptavidin Resin	Reactive or incompatible with the following materials: oxidizing materials
	pBEn-SBP-SET1a Vector	May react or be incompatible with oxidising materials.
	pBEn-SBP-SET1b Vector	May react or be incompatible with oxidising materials.
	pBEn-SBP-SET1c	May react or be incompatible with oxidising materials.
	pBEn-SBP-SET2a Vector	May react or be incompatible with oxidising materials.
	pBEn-SBP-SET2b	May react or be incompatible with oxidising materials.
	pBEn-SBP-SET2c	May react or be incompatible with oxidising materials.
	pBEn-SBP-SET3a Vector	May react or be incompatible with oxidising materials.
	pBEn-SBP-SET3b Vector	May react or be incompatible with oxidising materials.
	pBEn-SBP-SET3c	May react or be incompatible with oxidising materials.
<b>10.6 Hazardous decomposition products</b>	<b>:</b> Streptavidin Resin	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET1a Vector	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET1b Vector	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET1c	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET2a Vector	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET2b	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET2c	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET3a Vector	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET3b Vector	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	pBEn-SBP-SET3c	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Not available.

#### Acute toxicity estimates

Not available.

#### Irritation/Corrosion

**Conclusion/Summary** : Not available.

#### Sensitiser

**Conclusion/Summary** : Not available.

## SECTION 11: Toxicological information

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

<b>Information on likely routes of exposure</b>	: Streptavidin Resin pBEn-SBP-SET1a Vector pBEn-SBP-SET1b Vector pBEn-SBP-SET1c pBEn-SBP-SET2a Vector pBEn-SBP-SET2b pBEn-SBP-SET2c pBEn-SBP-SET3a Vector pBEn-SBP-SET3b Vector pBEn-SBP-SET3c	Routes of entry anticipated: Oral, Dermal, Inhalation. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
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### Potential acute health effects

<b>Inhalation</b>	: Streptavidin Resin pBEn-SBP-SET1a Vector pBEn-SBP-SET1b Vector pBEn-SBP-SET1c pBEn-SBP-SET2a Vector pBEn-SBP-SET2b pBEn-SBP-SET2c pBEn-SBP-SET3a Vector pBEn-SBP-SET3b Vector pBEn-SBP-SET3c	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
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<b>Ingestion</b>	: Streptavidin Resin pBEn-SBP-SET1a Vector pBEn-SBP-SET1b Vector pBEn-SBP-SET1c pBEn-SBP-SET2a Vector pBEn-SBP-SET2b pBEn-SBP-SET2c pBEn-SBP-SET3a Vector pBEn-SBP-SET3b Vector pBEn-SBP-SET3c	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
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<b>Skin contact</b>	: Streptavidin Resin pBEn-SBP-SET1a Vector pBEn-SBP-SET1b Vector pBEn-SBP-SET1c pBEn-SBP-SET2a Vector pBEn-SBP-SET2b pBEn-SBP-SET2c pBEn-SBP-SET3a Vector pBEn-SBP-SET3b Vector pBEn-SBP-SET3c	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
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## SECTION 11: Toxicological information

<b>Eye contact</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	: Streptavidin Resin	No specific data.
	pBEn-SBP-SET1a Vector	No specific data.
	pBEn-SBP-SET1b Vector	No specific data.
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a Vector	No specific data.
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.
	pBEn-SBP-SET3a Vector	No specific data.
	pBEn-SBP-SET3b Vector	No specific data.
	pBEn-SBP-SET3c	No specific data.

<b>Ingestion</b>	: Streptavidin Resin	No specific data.
	pBEn-SBP-SET1a Vector	No specific data.
	pBEn-SBP-SET1b Vector	No specific data.
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a Vector	No specific data.
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.
	pBEn-SBP-SET3a Vector	No specific data.
	pBEn-SBP-SET3b Vector	No specific data.
	pBEn-SBP-SET3c	No specific data.

<b>Skin contact</b>	: Streptavidin Resin	No specific data.
	pBEn-SBP-SET1a Vector	No specific data.
	pBEn-SBP-SET1b Vector	No specific data.
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a Vector	No specific data.
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.
	pBEn-SBP-SET3a Vector	No specific data.
	pBEn-SBP-SET3b Vector	No specific data.
	pBEn-SBP-SET3c	No specific data.

<b>Eye contact</b>	: Streptavidin Resin	No specific data.
	pBEn-SBP-SET1a Vector	No specific data.
	pBEn-SBP-SET1b Vector	No specific data.
	pBEn-SBP-SET1c	No specific data.
	pBEn-SBP-SET2a Vector	No specific data.
	pBEn-SBP-SET2b	No specific data.
	pBEn-SBP-SET2c	No specific data.
	pBEn-SBP-SET3a Vector	No specific data.
	pBEn-SBP-SET3b Vector	No specific data.
	pBEn-SBP-SET3c	No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

<b>General</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.
<b>Developmental effects</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.

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<b>Fertility effects</b>	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEn-SBP-SET1a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET1c	No known significant effects or critical hazards.
	pBEn-SBP-SET2a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET2b	No known significant effects or critical hazards.
	pBEn-SBP-SET2c	No known significant effects or critical hazards.
	pBEn-SBP-SET3a Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3b Vector	No known significant effects or critical hazards.
	pBEn-SBP-SET3c	No known significant effects or critical hazards.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

Not available.

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

**Soil/water partition coefficient ( $K_{oc}$ )** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

ADR/RID / IMDG / IATA : Not regulated.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** : Not available.

## SECTION 15: Regulatory information

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

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	<b>:</b> Streptavidin Resin	Not applicable.
	pBEn-SBP-SET1a Vector	Not applicable.
	pBEn-SBP-SET1b Vector	Not applicable.
	pBEn-SBP-SET1c	Not applicable.
	pBEn-SBP-SET2a Vector	Not applicable.
	pBEn-SBP-SET2b	Not applicable.
	pBEn-SBP-SET2c	Not applicable.
	pBEn-SBP-SET3a Vector	Not applicable.
	pBEn-SBP-SET3b Vector	Not applicable.
	pBEn-SBP-SET3c	Not applicable.

#### Other EU regulations

##### Ozone depleting substances (1005/2009/EU)

Not listed.

##### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

##### Seveso Directive

☒ This product is not controlled under the Seveso Directive.

##### Danger criteria

###### Category

☒ Streptavidin Resin  
P5c

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol (Annexes A, B, C, E)

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

##### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

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## SECTION 15: Regulatory information

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: All components are listed or exempted.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : All components are listed or exempted.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: <input checked="" type="checkbox"/> Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: All components are listed or exempted.
<b>Viet Nam</b>	: <input checked="" type="checkbox"/> Not determined.

<b>15.2 Chemical safety assessment</b>	: This product contains substances for which Chemical Safety Assessments might still be required.
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## SECTION 16: Other information

☒ Indicates information that has changed from previously issued version.

<b>Abbreviations and acronyms</b>	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
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### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
<b>Streptavidin Resin</b> Flam. Liq. 3, H226	On basis of test data

### Full text of abbreviated H statements

<input checked="" type="checkbox"/> <b>Streptavidin Resin</b> H225 H226	Highly flammable liquid and vapour. Flammable liquid and vapour.
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### Full text of classifications [CLP/GHS]

<input checked="" type="checkbox"/> <b>Streptavidin Resin</b> Flam. Liq. 2, H225 Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3
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**Date of issue/ Date of revision** : 21/05/2018

**Date of previous issue** : 29/04/2016

**Version** : 2

### Notice to reader

VariFlex Bacterial Protein Expression System, Part Number 240165

SECTION 16: Other information

Disclaimer: The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.