

SAFETY DATA SHEET



VariFlex Bacterial Protein Expression System, Part Number 240175

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 240175
Part no. (chemical kit) : 240175
Part no. : Streptavidin Resin 240105-51
pBEc-SBP Vector 240174-51

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

Material uses : Analytical reagent.
Streptavidin Resin 1.25 ml
pBEc-SBP Vector 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
pBEc-SBP Vector 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
pBEc-SBP Vector No signal word.

Hazard statements : Streptavidin Resin H226 - Flammable liquid and vapour.
pBEc-SBP Vector No known significant effects or critical hazards.

Precautionary statements

Date of issue/Date of revision : 22/02/2018

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SECTION 2: Hazards identification

Prevention	: Streptavidin Resin pBEc-SBP Vector	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. Not applicable.
Response	: Streptavidin Resin pBEc-SBP Vector	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Not applicable.
Storage	: Streptavidin Resin pBEc-SBP Vector	Not applicable. Not applicable.
Disposal	: Streptavidin Resin pBEc-SBP Vector	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable.
Supplemental label elements	: Streptavidin Resin pBEc-SBP Vector	Not applicable. Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Streptavidin Resin pBEc-SBP Vector	Not applicable. Not applicable.
<u>Special packaging requirements</u>		
Tactile warning of danger	: Streptavidin Resin pBEc-SBP Vector	Not applicable. Not applicable.

2.3 Other hazards

Other hazards which do not result in classification	: Streptavidin Resin pBEc-SBP Vector	None known. None known.
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SECTION 3: Composition/information on ingredients

3.1 Substances	: Streptavidin Resin pBEc-SBP Vector	Mixture Mixture
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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 See Section 16 for the full text of the H statements declared above.	[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

Eye contact	: 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.
	pBEc-SBP 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.
Inhalation	: Streptavidin Resin	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.
	pBEc-SBP Vector	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.
	pBEc-SBP Vector	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: 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.
	pBEc-SBP 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.
Protection of first-aiders	: 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.
	pBEc-SBP Vector	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

Eye contact	: Streptavidin Resin	No known significant effects or critical hazards.
	pBEc-SBP Vector	No known significant effects or critical hazards.

SECTION 4: First aid measures

Inhalation	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Streptavidin Resin pBEc-SBP Vector	No specific data. No specific data.
Inhalation	: Streptavidin Resin pBEc-SBP Vector	No specific data. No specific data.
Skin contact	: Streptavidin Resin pBEc-SBP Vector	No specific data. No specific data.
Ingestion	: Streptavidin Resin pBEc-SBP Vector	No specific data. No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Streptavidin Resin pBEc-SBP Vector	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: Streptavidin Resin pBEc-SBP Vector	No specific treatment. No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Streptavidin Resin pBEc-SBP Vector	Use dry chemical, CO ₂ , water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Streptavidin Resin pBEc-SBP Vector	Do not use water jet. None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: <input checked="" type="checkbox"/> Streptavidin Resin pBEc-SBP Vector	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. In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	: Streptavidin Resin pBEc-SBP Vector	Decomposition products may include the following materials: carbon dioxide carbon monoxide No specific data.

5.3 Advice for firefighters

Special precautions for fire-fighters	: Streptavidin Resin pBEc-SBP Vector	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
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SECTION 5: Firefighting measures

Special protective equipment for fire-fighters	: Streptavidin Resin	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.
	pBEc-SBP 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: 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.
	pBEc-SBP 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.
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".
	pBEc-SBP 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".

6.2 Environmental precautions

: 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).
pBEc-SBP 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).

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.
	pBEc-SBP 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.

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SECTION 6: Accidental release measures

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

Protective measures	: 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 product residue and can be hazardous. Do not reuse container.
	pBEc-SBP Vector	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: 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.
	pBEc-SBP 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.

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.
	pBEc-SBP 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.

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SECTION 7: Handling and storage

Danger criteria

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

7.3 Specific end use(s)

Recommendations	: Streptavidin Resin pBEc-SBP Vector	Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	: Streptavidin Resin pBEc-SBP Vector	Not applicable. Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Recommended monitoring procedures	: 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

Appropriate engineering controls	: <input checked="" type="checkbox"/> Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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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.
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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.
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Skin protection

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SECTION 8: Exposure controls/personal 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

Physical state	: Streptavidin Resin pBEc-SBP Vector	Liquid. Liquid.
Colour	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Odour	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Odour threshold	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
pH	: Streptavidin Resin pBEc-SBP Vector	7.5 7.5
Melting point/freezing point	: Streptavidin Resin pBEc-SBP Vector	Not available. 0°C
Initial boiling point and boiling range	: Streptavidin Resin pBEc-SBP Vector	Not available. 100°C
Flash point	: Streptavidin Resin pBEc-SBP Vector	Closed cup: 37.8 to 61°C Not available.
Evaporation rate	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Flammability (solid, gas)	: Streptavidin Resin pBEc-SBP Vector	Not applicable. Not applicable.
Upper/lower flammability or explosive limits	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Vapour pressure	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Vapour density	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Relative density	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Solubility(ies)	: Streptavidin Resin pBEc-SBP Vector	Soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.

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SECTION 9: Physical and chemical properties

Partition coefficient: n-octanol/water	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Auto-ignition temperature	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Decomposition temperature	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Viscosity	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Explosive properties	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.
Oxidising properties	: Streptavidin Resin pBEc-SBP Vector	Not available. Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: Streptavidin Resin pBEc-SBP Vector	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Streptavidin Resin pBEc-SBP Vector	The product is stable. The product is stable.
10.3 Possibility of hazardous reactions	: Streptavidin Resin pBEc-SBP Vector	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: Streptavidin Resin pBEc-SBP Vector	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. No specific data.
10.5 Incompatible materials	: Streptavidin Resin pBEc-SBP Vector	Reactive or incompatible with the following materials: oxidizing materials May react or be incompatible with oxidising materials.
10.6 Hazardous decomposition products	: Streptavidin Resin pBEc-SBP Vector	Under normal conditions of storage and use, hazardous decomposition products should not be produced. 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

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SECTION 11: Toxicological information

Conclusion/Summary : Not available.

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.

Information on likely routes of exposure : Streptavidin Resin
pBEc-SBP Vector

Routes of entry anticipated: Oral, Dermal, Inhalation.
Not available.

Potential acute health effects

Inhalation	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Eye contact	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: Streptavidin Resin pBEc-SBP Vector	No specific data. No specific data.
Ingestion	: Streptavidin Resin pBEc-SBP Vector	No specific data. No specific data.
Skin contact	: Streptavidin Resin pBEc-SBP Vector	No specific data. No specific data.
Eye contact	: Streptavidin Resin pBEc-SBP Vector	No specific data. 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

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
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SECTION 11: Toxicological information

Carcinogenicity	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Teratogenicity	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Developmental effects	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. No known significant effects or critical hazards.
Fertility effects	: Streptavidin Resin pBEc-SBP Vector	No known significant effects or critical hazards. 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.

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SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN3316	UN3316	UN3316
14.2 UN proper shipping name	CHEMICAL KIT	CHEMICAL KIT	Chemical kit
14.3 Transport hazard class(es)	9 	9 	9 
14.4 Packing group	II	II	II
14.5 Environmental hazards	No.	No.	No.

Additional information

Remarks: Excepted Quantity

ADR/RID : **Hazard identification number** 90
Limited quantity See SP 251
Special provisions 251, 340
Tunnel code (E)

IMDG : **Emergency schedules** F-A, _S-P_
Special provisions 251, 340

IATA : **Quantity limitation** Passenger and Cargo Aircraft: 10 kg. Packaging instructions: 960. Cargo Aircraft Only: 10 kg. Packaging instructions: 960. Limited Quantities - Passenger Aircraft: 1 kg. Packaging instructions: Y960.
Special provisions A44, A163

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.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Streptavidin Resin pBEc-SBP Vector Not applicable.
 Not applicable.

[Other EU regulations](#)

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SECTION 15: Regulatory information

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.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

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

15.2 Chemical safety assessment

: This product contains substances for which Chemical Safety Assessments might still be required.

VariFlex Bacterial Protein Expression System, Part Number 240175

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: 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

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Streptavidin Resin Flam. Liq. 3, H226	On basis of test data

Full text of abbreviated H statements

✔ Streptavidin Resin H225 H226	Highly flammable liquid and vapour. Flammable liquid and vapour.
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Full text of classifications [CLP/GHS]

✔ Streptavidin Resin Flam. Liq. 2, H225 Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3
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Notice to reader

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