

# SAFETY DATA SHEET

Berichrom® Plasminogen

SDS no.:

mrhm0241

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

### 1.1 Product identifier

**Product name** : Berichrom® Plasminogen  
**Product code** : OUCA17, 10446431

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

**Identified uses** Plasmin Substrate Diagnostic agents.  
 Streptokinase Reagent Diagnostic agents.

**Restrictions on use** For professional users only.

**Supplier** : Siemens Healthcare Diagnostics Limited  
 Park View,  
 Watchmoor Park,  
 Camberley,  
 Surrey,  
 GU15 3YL  
 United Kingdom

Phone: +44 (0) 345 600 1955

**e-mail address of person responsible for this SDS** : dx.msds.healthcare@siemens-healthineers.com

### 1.4 Emergency telephone number

CHEMTREC: +44 20 3807 3798

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Plasmin Substrate Mixture  
 Streptokinase Reagent Mixture

#### Classification according to UK CLP/GHS

#### **Streptokinase Reagent**

Acute Tox. 4, H302

Acute Tox. 3, H311

Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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** :



**Signal word** : Plasmin Substrate No signal word.  
 Streptokinase Reagent Danger

## SECTION 2: Hazards identification

<b>Hazard statements</b>	: Plasmin Substrate  Streptokinase Reagent	No known significant effects or critical hazards. H302 - Harmful if swallowed. H311 - Toxic in contact with skin. H411 - Toxic to aquatic life with long lasting effects.
 <b><u>Precautionary statements</u></b>		
<b>Prevention</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P273 - Avoid release to the environment.
<b>Response</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. P391 - Collect spillage. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse.
<b>Storage</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. Not applicable.
<b>Disposal</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, and national regulations.
<b>Supplemental label elements</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. Contains Kinase (enzyme-activating), strepto-. May produce an allergic reaction.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. Not applicable.
 <b>2.3 Other hazards</b>		
<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	: Plasmin Substrate  Streptokinase Reagent	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
<b>Other hazards which do not result in classification</b>	: Plasmin Substrate Streptokinase Reagent	None known. None known.
<b>Additional information</b>	: Not available.	Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

Berichrom® Plasminogen

## SECTION 3: Composition/information on ingredients

**3.1 Substances** : Plasmin Substrate Mixture  
Streptokinase Reagent Mixture

Product/ingredient name	Identifiers	%	Classification	Type
<b>Streptokinase Reagent</b> sodium azide	EC: 247-852-1 CAS: 26628-22-8 Index: 011-004-00-7	<9	Acute Tox. 2, H300 Acute Tox. 1, H310 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) EUH032	[1] [2]
Kinase (enzyme-activating), strepto-	EC: 232-647-1 CAS: 9002-01-1	≤0.3	Resp. Sens. 1, H334  <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Eye contact</b>	: Plasmin Substrate	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.
	Streptokinase Reagent	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.
<b>Inhalation</b>	: Plasmin Substrate	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Streptokinase Reagent	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 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## SECTION 4: First aid measures

<b>Skin contact</b>	: Plasmin Substrate  Streptokinase Reagent	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	: Plasmin Substrate  Streptokinase Reagent	Wash out mouth with water. 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. Wash out mouth with water. Remove dentures if any. 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 necessary, call a poison center or physician. 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.
<b>Protection of first-aiders</b>	: Plasmin Substrate  Streptokinase Reagent	No action shall be taken involving any personal risk or without suitable training. 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: Plasmin Substrate Streptokinase Reagent	No specific data. No specific data.
<b>Inhalation</b>	: Plasmin Substrate Streptokinase Reagent	No specific data. No specific data.
<b>Skin contact</b>	: Plasmin Substrate Streptokinase Reagent	No specific data. No specific data.
<b>Ingestion</b>	: Plasmin Substrate Streptokinase Reagent	No specific data. No specific data.

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

Berichrom® Plasminogen

## SECTION 4: First aid measures

<b>Notes to physician</b>	: Plasmin Substrate  Streptokinase Reagent	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	: Plasmin Substrate Streptokinase Reagent  Plasmin Substrate Streptokinase Reagent	No specific treatment. No specific treatment.  Not available. Not available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: None known.

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

<b>Hazards from the substance or mixture</b>	: This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
<b>Hazardous combustion products</b>	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides metal oxide/oxides

### 5.3 Advice for firefighters

<b>Special protective actions for fire-fighters</b>	: 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.
<b>Special protective equipment for fire-fighters</b>	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## SECTION 6: Accidental release measures

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

<b>For non-emergency personnel</b>	: 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: 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

: 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

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

Berichrom® Plasminogen

## SECTION 6: Accidental release measures

- Small spill** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- 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** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : 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

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. Store locked up. 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.

### Seveso Directive - Reporting thresholds

#### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
Streptokinase Reagent E2	200 tonne	500 tonne

### 7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
Streptokinase Reagent sodium azide	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b> STEL: 0.3 mg/m <sup>3</sup> , (as NaN <sub>3</sub> ) 15 minutes. TWA: 0.1 mg/m <sup>3</sup> , (as NaN <sub>3</sub> ) 8 hours.

## SECTION 8: Exposure controls/personal protection

**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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Streptokinase Reagent sodium azide	DNEL	Long term Oral	16.7 µg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	16.7 µg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	29 µg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	46.7 µg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.164 mg/ m <sup>3</sup>	Workers	Systemic

### PNECs

No PNECs available

## 8.2 Exposure controls

**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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**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.

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

**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**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**9.1 Information on basic physical and chemical properties****Appearance**

<b>Physical state</b>	: Plasmin Substrate Streptokinase Reagent	Solid. Solid.
<b>Colour</b>	: Plasmin Substrate Streptokinase Reagent	White. White to light yellow.
<b>Odour</b>	: Plasmin Substrate Streptokinase Reagent	Odourless. Odourless.
<b>Odour threshold</b>	: Not relevant/applicable due to nature of the product.	
<b>Melting point/freezing point</b>	: Not relevant/applicable due to nature of the product.	
<b>Softening point</b>	: Not relevant/applicable due to nature of the product.	
<b>Sublimation temperature</b>	: Not relevant/applicable due to nature of the product.	
<b>Initial boiling point and boiling range</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Flammability (solid, gas)</b>	: Plasmin Substrate  Streptokinase Reagent	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
<b>Upper/lower flammability or explosive limits</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. Not applicable.
<b>Flash point</b>	: Plasmin Substrate Streptokinase Reagent	[Product does not sustain combustion.] [Product does not sustain combustion.]
<b>Decomposition temperature</b>	: Not relevant/applicable due to nature of the product.	
<b>pH</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. Not applicable.
<b>Viscosity</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. Not applicable.
<b>Solubility(ies)</b>	:	
Not available.		
<b>Solubility in water</b>	: Not relevant/applicable due to nature of the product.	
<b>Miscible with water</b>	: Not relevant/applicable due to nature of the product.	
<b>Partition coefficient: n-octanol/water</b>	: Not relevant/applicable due to nature of the product.	
<b>Vapour pressure</b>	: Not available.	
<b>Evaporation rate</b>	: Not relevant/applicable due to nature of the product.	
<b>Relative density</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Density</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Vapour density</b>	: Plasmin Substrate Streptokinase Reagent	Not applicable. Not applicable.
<b>Explosive properties</b>	: Plasmin Substrate  Streptokinase Reagent	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and oxidising materials. Not available.



Berichrom® Plasminogen

**SECTION 9: Physical and chemical properties**

**Oxidising properties** : Plasmin Substrate Not available.  
Streptokinase Reagent Not available.

**Particle characteristics**

**Median particle size** : Not available.

**9.2 Other information**

**Fire point** : Plasmin Substrate Not available.  
Streptokinase Reagent Not available.

**Burning time** : Not relevant/applicable due to nature of the product.

**Fundamental burning velocity** : Not relevant/applicable due to nature of the product.

**Burning rate** : Not relevant/applicable due to nature of the product.

**SADT** : Not relevant/applicable due to nature of the product.

**SAPT** : Not relevant/applicable due to nature of the product.

**Heat of reaction** : Not relevant/applicable due to nature of the product.

**Heat of combustion** : Not relevant/applicable due to nature of the product.

**Flow time (ISO 2431)** : Not relevant/applicable due to nature of the product.

**Molecular weight** : Not relevant/applicable due to nature of the product.

**SECTION 10: Stability and reactivity**

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : No specific data.

**10.5 Incompatible materials** : No specific data.

**10.6 Hazardous decomposition products** : 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**

Product/ingredient name	Result	Species	Dose	Exposure
<b>Streptokinase Reagent</b> sodium azide	LD50 Dermal	Rabbit	20 mg/kg	-
	LD50 Dermal	Rat	50 mg/kg	-
	LD50 Oral	Rat	27 mg/kg	-

**Conclusion/Summary** : Plasmin Substrate Not available.  
Streptokinase Reagent Not available.

**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>Streptokinase Reagent</b>					
Streptokinase Reagent	505.6	374.5	N/A	N/A	N/A
sodium azide	27	20	N/A	N/A	N/A

**SECTION 11: Toxicological information****Irritation/Corrosion****Conclusion/Summary**

<b>Skin</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.
<b>Eyes</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.
<b>Respiratory</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.

**Sensitisation****Conclusion/Summary**

<b>Skin</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.
<b>Respiratory</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.

**Mutagenicity**

<b>Conclusion/Summary</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.

**Carcinogenicity**

<b>Conclusion/Summary</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.

**Reproductive toxicity**

<b>Conclusion/Summary</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.

**Teratogenicity**

<b>Conclusion/Summary</b>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	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>	: Plasmin Substrate	Not available.
	Streptokinase Reagent	Not available.

**Potential acute health effects**

<b>Eye contact</b>	: Plasmin Substrate	No known significant effects or critical hazards.
	Streptokinase Reagent	No known significant effects or critical hazards.
<b>Inhalation</b>	: Plasmin Substrate	No known significant effects or critical hazards.
	Streptokinase Reagent	No known significant effects or critical hazards.
<b>Skin contact</b>	: Plasmin Substrate	No known significant effects or critical hazards.
	Streptokinase Reagent	Toxic in contact with skin.
<b>Ingestion</b>	: Plasmin Substrate	No known significant effects or critical hazards.
	Streptokinase Reagent	Harmful if swallowed.

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

**SECTION 11: Toxicological information**

<b>Eye contact</b>	: Plasmin Substrate Streptokinase Reagent	No specific data. No specific data.
<b>Inhalation</b>	: Plasmin Substrate Streptokinase Reagent	No specific data. No specific data.
<b>Skin contact</b>	: Plasmin Substrate Streptokinase Reagent	No specific data. No specific data.
<b>Ingestion</b>	: Plasmin Substrate Streptokinase Reagent	No specific data. No specific data.

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

<b>Potential immediate effects</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Potential delayed effects</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.

**Long term exposure**

<b>Potential immediate effects</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Potential delayed effects</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.

**Potential chronic health effects**

Not available.

<b>Conclusion/Summary</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>General</b>	: Plasmin Substrate  Streptokinase Reagent	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: Plasmin Substrate  Streptokinase Reagent	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: Plasmin Substrate  Streptokinase Reagent	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: Plasmin Substrate  Streptokinase Reagent	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Interactive effects</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b><u>Toxicokinetics</u></b>		
<b>Absorption</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Distribution</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Metabolism</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Elimination</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.
<b>Other information</b>	: Plasmin Substrate Streptokinase Reagent	Not available. Not available.

Berichrom® Plasminogen

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Streptokinase Reagent sodium azide	Acute EC50 9200 µg/l Marine water	Algae - Giant kelp - Macrocystis pyrifera	96 hours
	Acute EC50 6.4 mg/l Fresh water	Crustaceans - Water flea - Simocephalus serrulatus - Larvae	48 hours
	Acute EC50 4.2 mg/l Fresh water	Daphnia - Water flea - Daphnia pulex - Larvae	48 hours
	Acute LC50 0.68 mg/l Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
	Chronic NOEC 5600 µg/l Marine water	Algae - Giant kelp - Macrocystis pyrifera	96 hours

**Conclusion/Summary** : Plasmin Substrate Not available.  
Streptokinase Reagent Not available.

### 12.2 Persistence and degradability

**Conclusion/Summary** : Plasmin Substrate Not available.  
Streptokinase Reagent Not available.

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Plasmin Substrate Not available.  
Streptokinase Reagent Not available.

**Mobility** : Plasmin Substrate Not available.  
Streptokinase Reagent Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**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** : The classification of the product may meet the criteria for a hazardous waste. Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

#### 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.


Berichrom® Plasminogen

## SECTION 13: Disposal considerations


**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

<b>14.1 UN number</b>	Plasmin Substrate Streptokinase Reagent	Not regulated. UN3288
<b>14.2 UN proper shipping name</b>	Plasmin Substrate Streptokinase Reagent	- TOXIC SOLID, INORGANIC, N.O.S. (sodium azide)
<b>14.3 Transport hazard class(es)</b>	Plasmin Substrate Streptokinase Reagent 	- 6.1
<b>14.4 Packing group</b>	Plasmin Substrate Streptokinase Reagent	- III
<b>14.5 Environmental hazards</b>	Plasmin Substrate Streptokinase Reagent	No. No.
<b>Additional information</b>	Plasmin Substrate Streptokinase Reagent	- <b><u>Tunnel code</u></b> (E)

### ADN

<b>14.1 UN number</b>	Plasmin Substrate Streptokinase Reagent	Not regulated. UN3288
<b>14.2 UN proper shipping name</b>	Plasmin Substrate Streptokinase Reagent	- TOXIC SOLID, INORGANIC, N.O.S. (sodium azide)
<b>14.3 Transport hazard class(es)</b>	Plasmin Substrate Streptokinase Reagent 	- 6.1
<b>14.4 Packing group</b>	Plasmin Substrate Streptokinase Reagent	- III
<b>14.5 Environmental hazards</b>	Plasmin Substrate Streptokinase Reagent	No. No.
<b>Additional information</b>	Plasmin Substrate Streptokinase Reagent	- -

### IMDG

<b>14.1 UN number</b>	Plasmin Substrate Streptokinase Reagent	Not regulated. UN3288
<b>14.2 UN proper shipping name</b>	Plasmin Substrate Streptokinase Reagent	- TOXIC SOLID, INORGANIC, N.O.S. (sodium azide)

Berichrom® Plasminogen

## SECTION 14: Transport information

<b>14.3 Transport hazard class(es)</b>	Plasmin Substrate Streptokinase Reagent	- 6.1
		
<b>14.4 Packing group</b>	Plasmin Substrate Streptokinase Reagent	- III
<b>14.5 Environmental hazards</b>	Plasmin Substrate Streptokinase Reagent	No. No.
<b>Additional information</b>	Plasmin Substrate Streptokinase Reagent	- -
<b>IATA</b>		
<b>14.1 UN number</b>	Plasmin Substrate Streptokinase Reagent	Not regulated. UN3288
<b>14.2 UN proper shipping name</b>	Plasmin Substrate Streptokinase Reagent	- TOXIC SOLID, INORGANIC, N.O.S. (sodium azide)
<b>14.3 Transport hazard class(es)</b>	Plasmin Substrate Streptokinase Reagent	- 6.1
		
<b>14.4 Packing group</b>	Plasmin Substrate Streptokinase Reagent	- III
<b>14.5 Environmental hazards</b>	Plasmin Substrate Streptokinase Reagent	No. No.
<b>Additional information</b>	Plasmin Substrate Streptokinase Reagent	- -
<b>14.6 Special precautions for user</b>	Plasmin Substrate  Streptokinase Reagent	<b>Transport within user's premises:</b> 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.  <b>Transport within user's premises:</b> 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.
<b>14.7 Transport in bulk according to IMO instruments</b>	: Not applicable.	

Berichrom® Plasminogen

## SECTION 15: Regulatory information

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

#### UK (GB) /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.

##### Ozone depleting substances

Not listed.

##### Prior Informed Consent (PIC)

Not listed.

##### Persistent Organic Pollutants

Not listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Plasmin Substrate Not applicable.  
Streptokinase Reagent Not applicable.

#### Seveso Directive

This product is controlled under the Seveso Directive.

#### Danger criteria

##### Category

Streptokinase Reagent  
E2

#### National regulations

##### EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Plasmin Substrate Not listed  
Streptokinase Reagent Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Plasmin Substrate Not listed  
Streptokinase Reagent Not listed

#### International regulations

##### Montreal Protocol

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.

**15.2 Chemical safety assessment** : Not applicable.

Berichrom® Plasminogen

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

### Abbreviations and acronyms

: ATE = Acute Toxicity Estimate  
 GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = GB CLP-specific Hazard statement  
 N/A = Not available  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 SGG = Segregation Group  
 vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification

Classification	Justification
<b>Streptokinase Reagent</b> Acute Tox. 4, H302 Acute Tox. 3, H311 Aquatic Chronic 2, H411	Calculation method Calculation method Calculation method

### Full text of abbreviated H statements

<b>Streptokinase Reagent</b>	
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.

### Full text of classifications

<b>Streptokinase Reagent</b>	
Acute Tox. 1	ACUTE TOXICITY - Category 1
Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Resp. Sens. 1	RESPIRATORY SENSITISATION - Category 1

**Date of printing** : 12/13/2022  
**Date of issue/ Date of revision** : 12/13/2022  
**Date of previous issue** : No previous validation  
**Version** : 1

### Notice to reader



Berichrom® Plasminogen

## SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.