Chemical Safety Data Sheet MSDS / SDS

STREPTOKINASE

Revision Date:2024-08-31 Revision Number:1

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

Product identifier

Product name	: STREPTOKINASE	
CBnumber	: CB8492124	
CAS	: 9002-01-1	
EINECS Number	: 232-647-1	
Synonyms	: Streptokinase,SK	
Relevant identified uses of the substance or mixture and uses advised against		
Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.	
Relevant identified uses Uses advised against	: For R&D use only. Not for medicinal, household or other use. : none	
Uses advised against		

SECTION 2: Hazards identification

Classification of the substance or mixture

Respiratory sensitization, Category 1

Label elements

Pictogram(s)

Telephone

Signal word

Danger

: 400-158-6606

Hazard statement(s)

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statement(s)

Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P284 [In case of inadequate ventilation] wear respiratory protection.

Response

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P316 If experiencing respiratory symptoms: Get emergency medical help immediately. Chemical Book

1

Storage

none

Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards

no data available

SECTION 3: Composition/information on ingredients

Substance

Product name	: STREPTOKINASE
Synonyms	: Streptokinase,SK
CAS	: 9002-01-1
EC number	: 232-647-1
MF	: C11H19NO2
MW	: 197.274

SECTION 4: First aid measures

Description of first aid measures

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately.

Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

no data available

Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

Extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

Specific Hazards Arising from the Chemical

no data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use sparkproof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

SECTION 7: Handling and storage

Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

Exposure controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the riskelimination area.

Individual protection measures

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The

selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

Colourno data availableOdourno data availableMelting point/freezing pointno data availableBoiling point or initial boiling point and343.9°C at 760mmHgboiling rangeFlammabilityno data availableLower and upper explosionno data availableImit/flammability limitFlash point161.8°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablePHno data availableKinematic viscosityno data availableSolubilityno data availableVapour pressureno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3Relative vapour densityno data available	Physical state	lyophilized powder
Melting point/freezing pointno data availableBoiling point or initial boiling point and343.9°C at 760mmHgboiling rangeFlammabilityno data availableLower and upper explosionno data availablelimit/flammability limitFlash point161.8°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Colour	no data available
Boiling point or initial boiling point and343.9°C at 760mmHgboiling rangeFlammabilityno data availableLower and upper explosionno data availablelimit/flammability limitFlash point161.8°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Odour	no data available
boiling rangeFlammabilityno data availableLower and upper explosionno data availablelimit/flammability limitFlash point161.8°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Melting point/freezing point	no data available
Flammabilityno data availableLower and upper explosionno data availablelimit/flammability limitifel.8°CFlash point161.8°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Boiling point or initial boiling point and	343.9°C at 760mmHg
Lower and upper explosionno data availablelimit/flammability limitFlash point161.8°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	boiling range	
limit/flammability limitFlash point161.8°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Flammability	no data available
Flash point161.8°CAuto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Lower and upper explosion	no data available
Auto-ignition temperatureno data availableDecomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	limit/flammability limit	
Decomposition temperatureno data availablepHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Flash point	161.8°C
pHno data availableKinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Auto-ignition temperature	no data available
Kinematic viscosityno data availableSolubilityno data availablePartition coefficient n-octanol/waterno data availableVapour pressureno data availableDensity and/or relative density1.113g/cm3	Decomposition temperature	no data available
Solubility no data available Partition coefficient n-octanol/water no data available Vapour pressure no data available Density and/or relative density 1.113g/cm3	рН	no data available
Partition coefficient n-octanol/water no data available Vapour pressure no data available Density and/or relative density 1.113g/cm3	Kinematic viscosity	no data available
Vapour pressureno data availableDensity and/or relative density1.113g/cm3	Solubility	no data available
Density and/or relative density 1.113g/cm3	Partition coefficient n-octanol/water	no data available
	Vapour pressure	no data available
Relative vapour density no data available	Density and/or relative density	1.113g/cm3
	Relative vapour density	no data available
Particle characteristics no data available	Particle characteristics	no data available

SECTION 10: Stability and reactivity

no data available

Chemical stability

no data available

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Incompatible materials

no data available

Hazardous decomposition products

no data available

SECTION 11: Toxicological information

Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

SECTION 12: Ecological information

Toxicity

Toxicity to fish: no data available Toxicity to daphnia and other aquatic invertebrates: no data available Toxicity to algae: no data available Toxicity to microorganisms: no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects

no data available

SECTION 13: Disposal considerations

Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

Environmental hazards

ADR/RID: No IMDG: No IATA: No

Special precautions for user

no data available

Transport in bulk according to IMO instruments

no data available

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)

Listed.

EC Inventory
Listed.

United States Toxic Substances Control Act (TSCA) Inventory
Not Listed.

China Catalog of Hazardous chemicals 2015
Not Listed.

New Zealand Inventory of Chemicals (NZIoC)
Not Listed.

PICCS
Not Listed.

Vietnam National Chemical Inventory

Not Listed.

IECSC

Not Listed.

Korea Existing Chemicals List (KECL)

Not Listed.

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulation concerning the International Carriage of Dangerous Goods by Rail IMDG: International Maritime Dangerous Goods IATA: International Air Transportation Association TWA: Time Weighted Average STEL: Short term exposure limit LC50: Lethal Concentration 50% LD50: Lethal Dose 50% EC50: Effective Concentration 50%

References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index? pageID=0&request_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.