

Safety Data Sheet

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

Identification of the substance or mixture

Product code	15140122
Product name	PENICILLIN STREPTOMYCIN SOL

Company/undertaking identification

Life Technologies Corporation 5781 Van Allen Way PO Box 6482 Carlsbad, CA 92008 +1 760 603 7200 Life Technologies 5250 Mainway Drive Burlington, ONT CANADA L7L 6A4 800/263-6236

24 hour Emergency Response for Hazardous MaterialsWithin the USA + Canada: 1-800-424-9300 and[or Dangerous Goods] Incident. Spill, Leak, Fire,
Exposure, or Accident. Call CHEMTREC1-703-527-3887
Outside the USA + Canada: 1-703-741-5970

Country Specific Emergency Number (if available):

For research use only. Not for use in diagnostic procedures

SECTION 2: Hazards identification

GHS Classification

Signal Word WARNING

Hazard pictograms



Health hazards

Revision date Product code 16-Aug-2024 15140122

Skin sensitization	Category 1
Reproductive Toxicity	Category 2

Physical hazards

Not Hazardous

Environmental hazards

Not Hazardous

Hazard Statements

H317 - May cause an allergic skin reaction H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child

Precautionary Statements

Prevention

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P308 + P313 - IF exposed or concerned: Get medical advice/attention P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention P362 + P364 - Take off contaminated clothing and wash it before reuse

Storage

Not Applicable

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards

Not Applicable

HMIS

Health	4 *
Flammability	0
Reactivity	0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS No.	Common name	EC No.	Weight-%
Streptomycin sulfate	3810-74-0	Not applicable	223-286-0	1-5
Penicillin G Sodium Salt	69-57-8	Not applicable	200-710-2	0.1-1.0

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Description of first aid measures

Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Notes to Physician	Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H317 - May cause an allergic skin reaction H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child

Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media Water spray. Carbon dioxide (CO₂). Foam. Dry chemical. No information available.

Special hazards arising from the substance or mixture No data

Hazardous Combustion Products

None under normal use conditions.

Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation Always wear recommended Personal Protective Equipment Use personal protection equipment See section 8 for more information

Environmental precautions

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Streptomycin sulfate	None	None	None	None
Penicillin G Sodium Salt	None	None	None	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
Streptomycin sulfate	None	None	None
Penicillin G Sodium Salt	None	None	None

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipr	ment
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Respiratory protection	In case of insufficient ventilation wear respirators and components tested and
	approved under appropriate government standards.

- Hand protection Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.
- **Eye protection** Tight sealing safety goggles.
- Skin and Body Protection Wear suitable protective clothing.
- Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

Information on basic physical and chemical properties

Physical state Color Odor Molecular Weight Melting point / melting range	liquid No data No data No data ° C No data	°F No data
Boiling point / boiling range	°C No data	°F No data
Flammability (solid, gas)	No data	
Lower explosion limit Upper explosion limit	No data No data	
Flash point	°C No data	°F No data
Autoignition Temperature	°C No data	°F No data
Decomposition temperature	°C No data	°F No data
pH	4-6	
Evaporation rate	No data	
Viscosity	No data	
Solubility	No data	
Partition coefficient:	No data	
n-octanol/water		
Vapor Pressure	No data	
Specific gravity	No data No data	
Relative density Vapor density	No data	
Explosive properties	No data	
Oxidizing properties	No data	
Particle characteristics	No data	

Other information

Information with regard to physical hazard classes No information available

Other safety characteristics

No information available

SECTION 10: Stability and reactivity

Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous reaction has not been reported.
Conditions to avoid	No information available.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	None under normal use conditions.

SECTION 11: Toxicological information

Information on toxicological effects

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Streptomycin sulfate	= 430 mg/kg (Rat)	No data available	No data available
Penicillin G Sodium Salt	= 6916 mg/kg (Rat)	No data available	No data available

Principal Routes of Exposure

Acute toxicity	Data are conclusive but insufficient for classification.	
Skin corrosion/irritation	Data are conclusive but insufficient for classification	
Serious eye damage/irritation Data are conclusive but insufficient for classification		
Respiratory or skin sensitization	May cause sensitization by skin contact	
Specific target organ toxicit (STOT) – single exposure	y Data are conclusive but insufficient for classification	
Specific target organ toxicity Data are conclusive but insufficient for classification (STOT) – repeated exposure		
Carcinogenicity	Data are conclusive but insufficient for classification	
Germ cell mutagenicity	Data are conclusive but insufficient for classification	
Reproductive toxicity	May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility	
Aspiration hazard	Data are conclusive but insufficient for classification	

SECTION 12: Ecological information

Toxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Streptomycin sulfate	No data available	No data available	No data available	No data available	No data available
Penicillin G Sodium Salt	No data available	No data available	No data available	No data available	No data available

Mobility in soil No information available.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment No information available.

Other adverse effects

No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number or ID number UN proper shipping name Transport hazard class(es) Packing group

Not Applicable Not Applicable Not Applicable Not Applicable

Environmental hazards Not Applicable

Special precautions for user Not Applicable

Maritime transport in bulk according to IMO instruments Not Applicable.

SECTION 15: Regulatory information

Component	US TSCA
Streptomycin sulfate	Listed
3810-74-0 (1-5)	
Penicillin G Sodium Salt	-
69-57-8 (0.1-1.0)	

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical Name	CAS No.	Weight-%	Category
Streptomycin sulfate	3810-74-0	1-5	Developmental

WHMIS Hazard Class

D2A - Very toxic materials

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations - Brazil

Chemical Name	CAS No.	Brazil - National Agency for Sanitary Surveillance (ANVISA)	Brazil - National List of Carcinogen Agents to Humans (LINACH)
Streptomycin sulfate	3810-74-0	Not Listed	Not Listed
Penicillin G Sodium Salt	69-57-8	Not Listed	Not Listed

SECTION 16: Other information

Reason for revision	SDS sections updated.
Revision number	28
Revision date	16-Aug-2024

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References

- ECHA: http://echa.europa.eu/
- TOXNET: http://toxnet.nlm.nih.gov/
- eChemPortal: http://www.echemportal.org/
- LOLI database: https://www.chemadvisor.com/loli-database

Abbreviations and acronyms

TWA - Time-Weighted Average

- **OELs** Occupational Exposure Limits
- **STEL** Short Term Exposure Limit

 $\label{eq:DSL/NDSL} \textbf{DSL/NDSL} \ \textbf{-} \ \textbf{Canadian} \ \textbf{Domestic} \ \textbf{Substances} \ \textbf{List/Non-Domestic} \ \textbf{Substances} \ \textbf{List}$

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

CEPA - Canadian Environmental Protection Act

EPA - Environmental Protection Agency

OSHA - Occupational Safety and Health Administration of the US Department of Labor

IATA - International Air Transport Association

DOT - Department of Transportation

IMDG - International Maritime Dangerous Goods

ACGIH - American Conference of Governmental Industrial Hygienists

NIOSH - National Institute for Occupational Safety and Health

AIHA - American Industrial Hygiene Association

HMIS - Department of Defense Hazardous Materials Information System

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED,INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet