

Safety Data Sheet

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

Identification of the substance or mixture

Product code 15140148
Product name Penicillin-Streptomycin, liquid

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 Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC Within the USA + Canada: 1-800-424-9300 and 1-703-527-3887
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

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| | |
|-----------------------|------------|
| 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

H361 - Suspected of damaging fertility or 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 * Chronic Hazard |
| 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 | 0.5-1.5 |
| Penicillin G Sodium Salt | 69-57-8 | Not applicable | 200-710-2 | 0.5-1.5 |

We recommend handling all chemicals with caution.

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SECTION 4: First aid measures

Description of first aid measures

| | |
|---------------------------|---|
| Skin contact | Rinse skin with water. Immediate medical attention is not required. |
| Eye contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Ingestion | Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice. |
| Inhalation | Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary. |
| Notes to Physician | Treat symptomatically. |

Most important symptoms and effects, both acute and delayed

H317 - May cause an allergic skin reaction H361 - Suspected of damaging fertility or the unborn child

Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

SECTION 5: Firefighting measures

Extinguishing media

| | |
|---------------------------------------|---|
| Suitable extinguishing media | Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical. |
| Unsuitable extinguishing media | 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.

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 Equipment

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.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | | |
|---|------------|------------|
| Physical state | liquid | |
| Color | No data | |
| Odor | No data | |
| Molecular Weight | No data | |
| Melting point / melting range | °C No data | °F No data |
| Boiling point / boiling range | °C No data | °F No data |
| Flammability (solid, gas) | No data | |
| Lower explosion limit | No data | |
| Upper explosion limit | 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: n-octanol/water | No data | |
| Vapor Pressure | No data | |
| Specific gravity | No data | |
| Relative density | No data | |
| 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 toxicity (STOT) – single exposure | Data are conclusive but insufficient for classification |
| Specific target organ toxicity (STOT) – repeated exposure | Data are conclusive but insufficient for classification |
| 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.

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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 accordance with 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 | Not Applicable |
| UN proper shipping name | Not Applicable |
| Transport hazard class(es) | Not Applicable |
| Packing group | Not Applicable |

Environmental hazards

Not Hazardous

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 3810-74-0 (0.5-1.5) | Listed |
| Penicillin G Sodium Salt 69-57-8 (0.5-1.5) | - |

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

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California Proposition 65

This product contains the following Proposition 65 chemicals:

| <u>Chemical Name</u> | <u>CAS No.</u> | <u>Weight-%</u> | <u>Category</u> |
|----------------------|----------------|-----------------|-----------------|
| Streptomycin sulfate | 3810-74-0 | 0.5-1.5 | 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

| <u>Chemical Name</u> | <u>CAS No.</u> | <u>Brazil - National Agency for Sanitary Surveillance (ANVISA)</u> | <u>Brazil - National List of Carcinogen Agents to Humans (LINACH)</u> |
|--------------------------|----------------|--|---|
| 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 | 9 |
| Revision date | 12-Jan-2024 |

For research use only. Not for use in diagnostic procedures.

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances 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

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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