

Material Safety Data Sheet

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Version 1.3
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

| | |
|-------------------|---|
| Product Name | STREPTOMYCIN SULFATE |
| Product Number | 85880 |
| Company | Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia |
| Technical Phone # | +61 2 9841 0555 |
| Fax | +61 2 9841 0500 |
| Emergency Phone # | +61 2 9841 0566 |

2 - Composition/Information on Ingredients

| | | | |
|----------------------|---|-----------|-------------------------|
| Product Name | CAS # | EC no | Annex I Index Number |
| STREPTOMYCIN SULFATE | 3810-74-0 | 223-286-0 | None |
| Formula | 2C21H39N7O12 · (H ₂ SO ₄) ₃ | | |
| Molecular Weight | 1,457 AMU | | |
| Synonyms | Agrimycin 17 * Agristrep * AS-15 * Phytomycin * Plantomycin * Strepclin * Strep-gran * Strepsulfat * Streptomycin sesquisulfate * Streptomycin sulfate * Streptomycin sulphate B.P * Streptorex * Strepvet * Vetstrep | | |

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Harmful if swallowed.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Mechanical exhaust required. Safety shower and eye bath.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

| | | |
|-------------|-----------------------|----------------------------|
| Appearance | Physical State: Solid | |
| Property | Value | At Temperature or Pressure |
| pH | N/A | |
| BP/BP Range | N/A | |
| MP/MP Range | N/A | |

| | |
|-----------------------|--------|
| Flash Point | N/A |
| Flammability | N/A |
| Autoignition Temp | N/A |
| Oxidizing Properties | N/A |
| Explosive Properties | N/A |
| Explosion Limits | N/A |
| Vapor Pressure | N/A |
| SG/Density | N/A |
| Partition Coefficient | N/A |
| Viscosity | N/A |
| Vapor Density | N/A |
| Saturated Vapor Conc. | N/A |
| Evaporation Rate | N/A |
| Bulk Density | N/A |
| Decomposition Temp. | N/A |
| Solvent Content | N/A |
| Water Content | < 10 % |
| Surface Tension | N/A |
| Conductivity | N/A |
| Miscellaneous Data | N/A |
| Solubility | N/A |

10 - Stability and Reactivity

STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: WK4990000

ACUTE TOXICITY

LD50
Oral
Rat
430 mg/kg

LD50
Subcutaneous
Rat
600 MG/KG

LD50
Oral
Mouse
430 mg/kg

LD50
Subcutaneous
Mouse
403 MG/KG

LD50

Intravenous
Mouse
90200 UG/KG

LD50
Oral
Hamster
400 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity).
Behavioral: Food intake (animal). Gastrointestinal: Hypermotility, diarrhea.

SENSITIZATION

Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

SIGNS AND SYMPTOMS OF EXPOSURE

Aminoglycosides are associated with significant nephrotoxicity and/or ototoxicity. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: May cause eye irritation.
Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion: Harmful if swallowed.

TARGET ORGAN INFORMATION

Ears. Kidneys.

CHRONIC EXPOSURE - TERATOGEN

Result: Laboratory experiments have shown teratogenic effects.

Species: Woman
Dose: 1700 MG/KG
Route of Application: Intramuscular
Exposure Time: (26-39W PREG)
Result: Specific Developmental Abnormalities: Eye, ear.

Species: Mouse
Dose: 1200 MG/KG
Route of Application: Unreported
Exposure Time: (9-11D PREG)
Result: Effects on Embryo or Fetus: Fetal death.

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 37 GM/KG
Route of Application: Oral
Exposure Time: (MULTIGENERATIONS)
Result: Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xn

Harmful.

R-PHRASES: 22

Harmful if swallowed.

16 - Other Information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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