



SIGMA-ALDRICH

Material Safety Data Sheet

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Version 1.60

Section 1 - Product and Company Information

Product Name Streptomycin sulfate salt
Product Number S6501
Brand Sigma-Aldrich
Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5832
Fax: 800-325-5052
Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
STREPTOMYCIN SULFATE	3810-74-0	No	223-286-0	

Formula 2C21H39N7O12 · (H2SO4)3
Synonyms Aglmycin 17, Aglstrept, AS-15, Phytomycin, Plantomycin, Strepcin, Strept-gan, Strepsulfat, Streptomycin sesquisulfate, Streptomycin sulfate, Streptomycin sulphate B.P., Streptorex, Streptel, Velstrept

Section 3 - Hazards Identification

Emergency Overview
Toxic (USA) Hazard (EU)
Harmful if swallowed.
Target organ(s): Ears, Kidneys, Possible sensitizer. Calif. Prop. 65 reproductive hazard.

HMS Rating
Health: 2* Flammability: 0 Reactivity: 0

NFPA Rating
Health: 2 Flammability: 0 Reactivity: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Inhalation Exposure
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

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

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

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A
Extinguishing Media
Suitable
Water spray Carbon dioxide, dry chemical powder, or appropriate foam.
Firefighting Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s)
Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure 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.

Section 7 - Handling and Storage

Handling
User Exposure
Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
Storage
Suitable
Keep tightly closed. Store at 2-8°C

Section 8 - Exposure Controls / PPE

Engineering Controls
Mechanical exhaust required. Safety shower and eye bath.
Personal Protective Equipment
Respiratory
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.
Hand
Compatible chemical-resistant gloves.
Eye
Chemical safety goggles.

General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance	
Physical State	Solid
Molecular Weight:	1,457 AMU
pH	
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatiles	N/A
VOC Content	N/A
Water Content	< 10 %
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	
	N/A
Flammability	
Autoignition Temp	N/A
Solubility	N/A
N/A = not available	

Section 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.

Section 11 - Toxicological Information

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.			
Sensitization			
Sensitization			
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.			
Target Organ(s) or System(s)			
Ears, Kidneys.			
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.			
RTECS Number: WKK4990000			
Toxicity Data			
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 (LD50)			
Remarks: Behavioral:Somnolence (general depressed activity).			
Behavioral:Food intake (animal).			
Gastrointestinal:Hypermotility, diarrhea.			
Chronic Exposure - Teratogen			
Species	Dose	Route of Application	Exposure Time
Result: Laboratory experiments have shown teratogenic effects.			
Woman	1700 MG/KG	Intramuscular	(26-39W PREG)
Result: Specific Developmental Abnormalities: Eye, ear.			
Mouse	1200 MG/KG	Unreported	(9-11D PREG)
Result: Effects on Embryo or Fetus: Fetal death.			
Chronic Exposure - Reproductive Hazard			
Species	Dose	Route of Application	Exposure Time
Rat	37 GM/KG	Oral	(MULTIGENERATION S)
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).			

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
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.

Section 14 - Transport Information

DOT

Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: Xn
Indication of Danger

Harmful.

Risk Statements

R: 22

Harmful if swallowed.

US Classification and Label Text

Indication of Danger

Toxic (USA) Harmful (EU).

Risk Statements

Harmful if swallowed.

Safety Statements

Wear suitable protective clothing.

US Statements

Target organ(s): Ears, Kidneys, Possible sensitizer, Calif. Prop. 65 reproductive hazard.

United States Regulatory Information

SARA Listed: No

TSCA Inventory Item: Yes

United States - State Regulatory Information

California Prop. 65

This product is or contains chemical(s) known to the state of California to cause developmental toxicity. This product is or contains chemical(s) known to the state of California to cause developmental toxicity.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CFR, and the MSDS contains all the information required by the CFR.

DSL: Yes

NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

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

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