



## MATERIAL SAFETY DATA SHEET

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### 1. CHEMICAL IDENTIFICATION

Product Name: **Streptrol™** EPA Registration No.: 55146-80  
EPA Signal Word: Caution CAS No.: Mixture  
Active Ingredient (%): Streptomycin Sulfate  
Chemical Name: O-2-deoxy-2-methylamino-alpha-L-glucopyranosyl-  
(1->2)-O-5-deoxy-3-C-formyl-alpha-L-lyxofuranosyl-  
(1->4)-N3,N3-diamidino-D-streptamine-sulfate (2:3)  
Molecular Formula:  $C_{42}H_{78}N_{14}O_{24}$   
Molecular Weight: 1456.8402 (Streptomycin Sulfate)  
Chemical Class: Antibiotic for Agricultural Control of Bacterial Diseases in Plants

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	% by weight	ACGIH TLV	OSHA PEL	NTP/IARC/OSHA Carcinogen
Streptomycin Sulfate	21.3%	Not Established	Not Established	No
Other Inerts	13.8%	Not Established	Not Established	No
Diluent Group	64.9%	0.1 mg/m <sup>3</sup> (Respirable Dust-Quartz)	0.1 mg/m <sup>3</sup> (Respirable Dust-Quartz)	NTP; IARC, 2A

\* Components not precisely identified are proprietary or not hazardous.

### 3. HAZARDS IDENTIFICATION

#### POTENTIAL HEALTH EFFECTS

Eye Irritation: Exposure may cause eye irritation.  
Skin Irritation: Exposure may cause skin irritation. A skin sensitization (allergic) reaction may occur in some individuals. May be absorbed through the skin.  
Ingestion: May cause digestive tract irritation. May cause kidney damage, loss of hearing and/or neuromuscular paralysis.  
Inhalation: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

### 4. FIRST AID MEASURES

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Be prepared to give the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

Inhalation: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.  
Eye Contact: Immediately rinse eyes with a large amount of running water. Hold eyelids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.

Skin Contact: Wash with plenty of soap and water, including hair and under fingernails. Do not apply medicating agents except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.

Ingestion: If victim is fully conscious, give a large quantity of water to drink. Contact a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person.

Medical Condition Likely to be Aggravated by Exposure: Individuals with allergic history or pre-existing dermatitis should use extra care in handling this product.

## 5. FIRE FIGHTING MEASURES

Flash Point & Method: Not Applicable  
Flammable Limits: Not Applicable  
Autoignition Temperature: Not Available  
Flammability: Not Available

### FIRE FIGHTING HAZARDS & PROCEDURES

General Hazard: Thermal decomposition products may include, but are not limited to, Oxides of Nitrogen, Carbon and Sulfur.

Extinguishing Media: Use dry chemical, foam, water spray or CO<sub>2</sub> extinguishing media.

Fire Fighting Equipment: Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

## 6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak: Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and a NIOSH-approved dust respirator or a supplied-air respirator. For small spills, sweep up, keeping dust to a minimum and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

## 7. HANDLING AND STORAGE

General Information: Store the material in a well-ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco and cosmetic application in areas where there is potential for exposure to the material. Always wash thoroughly after handling.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### MANUFACTURING, COMMERCIAL BLENDING, & PACKAGING WORKERS

Follow label instructions when handling this product.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

Respiratory Protection: To avoid breathing dust, wear a NIOSH-approved dust respirator or a supplied-air respirator.

Eye Protection: To avoid eye contact, wear safety glasses with side shields or chemical goggles.

Protective Clothing: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering.

Applicators/Handlers: Please refer to the product label for personal protective clothing/equipment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	
Streptomycin Sulfate	Not Available
Density:	1.00 g/ml
Solubility in Water	
Streptomycin Sulfate	Not Available
pH:	4.67
Melting Point:	Not Available
Odor:	Fermentation-like Odor
Color:	Tan
Physical State:	Powder

## 10. STABILITY AND REACTIVITY

### STABILITY AND REACTIVITY

General:	Stable under normal conditions.
Incompatible Materials:	Strong oxidizers.
Conditions to Avoid:	Moisture in Air-tight Containers, Strong Acids and Bases.
Hazardous Decomposition:	Thermal decomposition products may include, but are not limited to, Oxides of Nitrogen, Carbon and Sulfur.
Hazardous Polymerization:	Will Not Occur.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

Inhalation:	Not Available Inhalation LC50 (Rat): Not Available
Eye Irritation:	Not Available
Dermal:	Moderately Toxic Dermal LD <sub>50</sub> (Rat): 600 mg/kg body weight
Skin Contact:	Not Available
Skin Sensitization:	Not Available
Ingestion:	Oral LD <sub>50</sub> (Mouse): 500 mg/kg body weight (streptomycin sulfate)

### Special Health Effects of Streptomycin Sulfate:

Mutagenic Potential	None Observed
Reproductive Hazard Potential:	May cause birth defects. Auditory nerve damage in the developing fetus.
Chronic/Subchronic Toxicity Studies:	Severe allergic reactions (anaphylactic). Clinical studies reported kidney damage and ear damage manifested by nausea, vomiting, dizziness, and numbness/tingling of face.
Carcinogenic Potential:	None Observed

### Toxicity of Other Components:

Diluent	High dust levels can cause pneumoconiosis, silicosis or pulmonary fibrosis. Listed by IARC as a group 2A carcinogen based on limited evidence in humans and sufficient data in animals. NTP recognizes this as a substance reasonably anticipated to be a carcinogen.
Surfactant	Prolonged exposure may result in temporary irritation of the eyes. Repeated skin contact may result in slight, temporary irritation. Ingestion of large amounts will result in diarrhea and weakness. Inhalation overexposure will not occur during normal use.

### Target Organs:

Active Ingredients:	
Streptomycin Sulfate	Kidney, Ear and Skin
Inert Ingredients:	
Diluent	Respiratory System
Surfactant	Eyes and Skin

## 12. ECOLOGICAL INFORMATION

### Summary of Effects

Streptomycin Sulfate: Not Available

### Eco-Acute Toxicity

Streptomycin Sulfate: Not Available

### Eco-Chronic Toxicity

Streptomycin Sulfate: Not Available

### Environmental Fate

Streptomycin Sulfate: Not Available

## 13. DISPOSAL CONSIDERATION

Disposal: Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

## 14. TRANSPORT INFORMATION

DOT Classification: Not Applicable; No Label or Placard Required

B/L Freight Classification: Insecticides or Fungicides; Agricultural, N.O.S.

International Transportation: Not Applicable

## 15. REGULATORY INFORMATION

Proposition 65: This product contains (Streptomycin Sulfate) a chemical known to the State of California to cause birth defects or other reproductive harm [listed January 1, 1991].

TSCA: Exempt from TSCA

CERCLA Reportable Quantity (RQ): None

RCRA: Not Applicable

SARA TITLE III -

311/312 Hazard Categories: Acute Health Hazard  
Chronic Health Hazard

313 Reportable Ingredients: Not Applicable

## 16. OTHER INFORMATION

HAZARD CLASSIFICATION (0-minimal, 1 -slight, 2-moderate, 3-serious, 4-severe)

NFPA: HEALTH- 1 FIRE- 0 REACTIVITY- 0

The information and recommendations contained herein are based upon data believed to be correct. However no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.

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