

## MATERIAL SAFETY DATA SHEET

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Version 1.9

## Section 1 - Product and Company Information

Product Name NEOMYCIN SULFATE CELL CULTURE TESTED  
Product Number N6386  
Brand SIGMA

Company Sigma-Aldrich  
Address 3050 Spruce Street  
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
NEOMYCIN SULFATE	1405-10-3	No

Formula  $C_{23}H_{46}N_6O_{13} \cdot 3H_2SO_4 \cdot xH_2O$

Synonyms Biosol veterinary \* Bykomycin \* Fradiomycin sulfate \* Lidamycin creme \* Mycifradin-N \* Mycaifradin sulfate \* Mycigient \* Neobiotic \* Neofracin \* Neo-mantle creme \* Neomix \* Neomycine sulfate \* Neomycin sulphate \* New France F \* Otobiotic \* Quintess-N \* USAF CB-19 \* Neomycin Trisulfate

RTECS Number: QP4375000

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Harmful.

May cause sensitization by inhalation and skin contact.

Calif. Prop. 65 developmental hazard. Target organ(s): Kidneys.

Ears.

## HMIS RATING

HEALTH: 3\*

FLAMMABILITY: 0

REACTIVITY: 0

## NFPA RATING

HEALTH: 3

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 breathing becomes difficult, call a physician.

#### 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. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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### Section 5 - Fire Fighting Measures

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#### FLASH POINT

N/A

#### AUTOIGNITION TEMP

N/A

#### FLAMMABILITY

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.

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### Section 6 - Accidental Release Measures

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#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, 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.

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### Section 7 - Handling and Storage

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#### HANDLING

User Exposure: Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Suitable: Keep tightly closed.

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### Section 8 - Exposure Controls / PPE

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#### ENGINEERING CONTROLS

Mechanical exhaust required.

#### 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 dust mask type N95 (US) or type P1 (EN 143) respirator.

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

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#### Section 9 - Physical/Chemical Properties

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Appearance	Physical State: Solid Color: Faintly yellow Form: Powder	
Property	Value	At Temperature or Pressure
Molecular Weight	908.88 AMU	
pH	N/A	
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	
Volatile%	N/A	
VOC Content	N/A	
Water Content	5 %	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	N/A	
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water:50 mg/ml H2O clear, faintly yellow	

N/A = not available

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#### Section 10 - Stability and Reactivity

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##### STABILITY

Stable: Stable.

Materials to Avoid: Oxidizing agents.

##### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide,

Nitrogen oxides, Sulfur oxides.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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Section 11 - Toxicological Information

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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: May be harmful if swallowed.

SENSITIZATION

Respiratory: May cause allergic respiratory reaction.

Skin: May cause allergic skin reaction.

TARGET ORGAN(S) OR SYSTEM(S)

Ears. Kidneys.

SIGNS AND SYMPTOMS OF EXPOSURE

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

TOXICITY DATA

Subcutaneous

Rat

200 MG/KG

LD50

Oral

Mouse

>8 GM(BASE)/KG

LD50

Intraperitoneal

Mouse

305 MG/KG

LD50

Subcutaneous

Mouse

190 MG/KG

LD50

Intravenous

Mouse

17400 UG/KG

LD50

Intramuscular

Mouse

142 MG/KG

LD50

Remarks: Behavioral:Convulsions or effect on seizure threshold.

Intracerebral

Mouse  
32 MG/KG  
LD50

Intramuscular  
Guinea pig  
>250 MG/KG  
LD50

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Ear:Change in acuity.

#### IRRITATION DATA

Skin  
Human  
6 mg  
3D  
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Remarks: Mild irritation effect

#### CHRONIC EXPOSURE - TERATOGEN

Result: Laboratory experiments have shown teratogenic effects.

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#### Section 12 - Ecological Information

No data available.

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#### Section 13 - Disposal Considerations

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#### 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.

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#### 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.

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#### Section 15 - Regulatory Information

#### EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn  
Indication of Danger: Harmful.  
R: 42/43  
Risk Statements: May cause sensitization by inhalation and skin contact.  
S: 22-36/37-45  
Safety Statements: Do not breathe dust. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.

Risk Statements: May cause sensitization by inhalation and skin contact.

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

US Statements: Calif. Prop. 65 developmental hazard. Target organ(s): Kidneys. Ears.

#### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

#### UNITED STATES - STATE REGULATORY INFORMATION

##### CALIFORNIA PROP - 65

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 CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

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#### Section 16 - Other Information

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#### 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 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 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.