

BIO BASIC INC.
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MATERIAL SAFETY DATA SHEET
REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

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DATE UPDATED: JUNE 02, 2014

SECTION 1. ----- CHEMICAL IDENTIFICATION -----

Product Name Penicillin/Streptomycin, Sterile
Product Code(s) BS732
Recommended Use For Further Manufacturing Use Only
Not for Human or Animal Drug Use

SECTION 2. ----- HAZARDS IDENTIFICATION -----

GHS – Classification

Classification Acute Toxicity Oral 4 Toxic to Reproduction 2 Skin Sensitizer 1 Respiratory
Sensitizer 1 Skin Irritant 2 Eye Irritant 2

Signal Word Danger



Hazard Statements

H315 - Causes skin irritation H319 - Causes serious eye irritation H317 - May cause an allergic skin reaction H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled H341 - Suspected of causing genetic defects

Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P280 - Wear protective gloves/protective clothing/eye protection/face protection P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke When using this product P301+P312-IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell P330 - Rinse mouth

SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-6-[(phenyl acetyl)amino]-[2-(2.alpha.,5.alpha.,6.beta.)]-, monosodium salt	EEC No. 200-710-2	Not available	69-57-8	.5-5	R43
Streptomycin sulfate	EEC No. 223-286-0	Not available	3810-74-0	.5-5	-

SECTION 4. ----- FIRST-AID MEASURES -----

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Move to fresh air. If breathing becomes difficult, give oxygen. May cause allergic respiratory reaction.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
Notes to Physician	Treat symptomatically.

SECTION 5. ----- FIRE FIGHTING MEASURES -----

Flammable Properties	Not flammable.
Flash Point	Not determined
Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam.
Hazardous Combustion Products	Nitrogen oxides (NOx), Sulfur oxides, Carbon oxides.
<u>Explosion Data</u>	
Sensitivity to Mechanical Impact	Not sensitive.
Sensitivity to Static Discharge	Not sensitive.
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES -----

Personal Precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation.
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Absorb with an inert material. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

SECTION 7. ----- HANDLING AND STORAGE-----

Handling Handle in accordance with good industrial hygiene and safety practice. Protect from light.

Storage Keep container tightly closed in a dry and well-ventilated place. Protect from light.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-6-[(phenylacetyl)amino]-[2-(2.alpha.,5.alpha.,6.beta.)]-, monosodium salt 69-57-8			
Streptomycin sulfate 3810-74-0			

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Personal Protective Equipment

Eye/Face Protection

Tightly fitting safety goggles.

Skin and Body Protection

Wear protective gloves/clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

Appearance	Colorless	
Odor	No information available	
Odor Threshold	No information available	
Decomposition Temperature °C	No information available	
Freezing Point	No information available	
Initial Boiling Point	No information available	
Physical State	Liquid	
pH	No data available	
Flash Point	Not determined	
Autoignition Temperature	No data available	
Boiling Point/Range	No data available	
Melting Point/Range	No data available	
Flammability Limits in Air	Upper No data available	Lower No data available
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Evaporation Rate	No data available	
MMHG @ 37.8 C	No data available	
Vapor Density	No data available	
Specific Gravity	No data available	
Solubility	No information available	
Partition Coefficient (n-octanol/water)	No data available	
Viscosity	No information available	

SECTION 10. -----STABILITY AND REACTIVITY -----

Stability	Stable under recommended storage conditions.
Incompatible Products	None known based on information supplied.
Conditions to Avoid	None known based on information supplied.
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides.
Hazardous Polymerization	Hazardous polymerization does not occur.

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

Acute Toxicity

Product Information	Toxic if swallowed. Sensitizer. Irritating to eye, skin and respiratory system.
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Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-6-[(phenylacetyl)amino]-[2-(2.alpha.,5.alpha.,6.beta.)]-, monosodium salt	6916 mg/kg (Rat)		
Streptomycin sulfate	430 mg/kg (Rat)		

Chronic Toxicity

Chronic Toxicity	May cause harm to the unborn child. Suspected teratogen.
Target Organ Effects	Ears, Kidneys.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

Ecotoxicity

The environmental impact of this product has not been fully investigated

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

Waste Disposal Method	Dispose of material in accordance with all federal, state, and local regulations
Contaminated Packaging	Dispose of in accordance with all federal, state and local regulations

SECTION 14. ----- TRANSPORT INFORMATION -----

IATA

Not regulated

DOT

Not regulated

SECTION 15. ----- REGULATORY INFORMATION -----

REACH Title VII Restrictions

No information available.

Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poison and Deleterious Substances Control Law:
4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-6-[(p henylacetyl)amino]- [2-(2.alpha.,5.alpha.,6.b eta.)]-, monosodium salt	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Streptomycin sulfate	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Component	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
4-Thia-1-azabicyclo[3.2.0] heptane-2-carboxylic acid, 3,3-dimethyl-7-oxo-6-[(phe nylacetyl)amino]- [2-(2.alpha.,5.alpha.,6.beta .)]-, monosodium salt 69-57-8 (.5-5)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Streptomycin sulfate 3810-74-0 (.5-5)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

International Inventories

TSCA

Complies

EINECS/ELINCS

Complies

ENCS

Does not Comply

IECSC

Does not Comply

KECL

Does not Comply

PICCS

Complies

AICS

Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
Streptomycin sulfate	3810-74-0	Developmental

International Regulations**Mexico - Grade**

No information available.

Canada**WHMIS Hazard Class**

D2A Very toxic materials

D2B Toxic materials

**SECTION 16. ----- OTHER INFORMATION -----****Issuing Date**

13-Aug-2009

Revision Date

02-June-2014

Revision Note No information available.

Recommended Restrictions No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS