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**SECTION 1: COMPANY AND PRODUCT INFORMATION**

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**1.1 Product identifiers**

Product name : Penicillin::Streptomycin Solution, Sterile  
Product code : 41610046  
CAS number : Not Available  
Synonyms : Not Available

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : For research and laboratory use only.

**1.3 Details of the supplier of the safety data sheet**

Address : Genelinx International Inc, dba bioWORLD  
4150 Tuller Rd. Suite 228  
Dublin, OH 43017

Email : tech@bio-world.com

Phone : 614-792-8680, Toll free: 1-888-bio-PLUS

Fax : 614-792-8685

**1.4 Emergency telephone number**

Emergency phone : 1-888-bio-PLUS

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**SECTION 2: HAZARDS IDENTIFICATION**

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**2.1 Classification of substance or mixture**

Respiratory sensitization (Category 1), H334  
Skin sensitization (Category 1), H317  
Specific target organ toxicity (single exposure) (Category 2), H371  
Reproductive Toxicity (Category 1A), H360  
Acute aquatic toxicity (Category 3), H402

**2.2 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Respiratory sensitization (Category 1), H334  
Skin sensitization (Category 1), H317  
Specific target organ toxicity (single exposure) (Category 2), H371  
Reproductive Toxicity (Category 1A), H360  
Acute aquatic toxicity (Category 3), H402

**2.3 Label elements and precautionary statements**

Pictogram : 

Signal word : Danger

|                            |  |
|----------------------------|--|
| Hazard statement(s)        | : H317 - May cause an allergic skin reaction.<br>H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br>H360 - May damage fertility or the unborn child.<br>H371 - May cause damage to organs.<br>H402 - Harmful to aquatic life.  |
| Precautionary statement(s) | : P201 - Obtain special instructions before use.<br>P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.<br>P264 - Wash hands thoroughly after handling.<br>P273 - Avoid release to the environment.<br>P280 - Wear protective gloves/protective clothing/eye protection/face protection.<br>P302+352 - IF ON SKIN: Wash with plenty of soap and water.<br>P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>P333+313 - If skin irritation or rash occurs: Get medical advice/attention.<br>P342+311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.<br>P362+364 - Take off all contaminated clothing and wash it before reuse.<br>P501 - Dispose of contents/container to an approved waste disposal plant. |

## 2.4 Hazards not otherwise classified (HNOC) or not covered by GHS

No unclassified hazards known.

## 2.5 NFPA Rating

|                   |     |
|-------------------|-----|
| Health hazard     | : 4 |
| Fire hazard       | : 0 |
| Reactivity hazard | : 0 |

## 2.6 HMIS Rating

|                       |     |
|-----------------------|-----|
| Health hazard         | : 4 |
| Chronic health hazard | : * |
| Reactivity hazard     | : 0 |
| Flammability          | : 0 |
| Physical hazard       | : 0 |

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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### 3.1 Substances

| Substance   | CAS#      | EC#       | Concentration |
|---|-----------|-----------|---------------|
| Streptomycin sulfate<br>M.F: C <sub>42</sub> H <sub>84</sub> N <sub>14</sub> O <sub>36</sub> S <sub>3</sub><br>M.W: 1457.38 g/mol | 3810-74-0 | 223-286-0 | 0.5-1.5%      |
| Penicillin G Sodium Salt<br>M.F: C <sub>16</sub> H <sub>17</sub> N <sub>2</sub> NaO <sub>4</sub> S<br>M.W: 356.37 g/mol           | 69-57-8   | 200-710-2 | 0.1-1.0%      |

### 3.2 Hazardous components & classification

Resp. Sens. 1; Skin Sens. 1; STOT SE 2; Repr. Tox. 1A; Acute Aquatic Tox. 3; H317, H334, H360, H371, H402

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## SECTION 4: FIRST AID MEASURES

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### 4.1 Description of first aid measures

#### General advice

Consult a physician if symptoms are severe or persistent. Provide this data sheet to medical personnel. If product is spilled or leaked, evacuate area.

#### In case of inhalation

If inhaled, move person to fresh air and monitor breathing. If not breathing, give artificial ventilation. Consult a physician if symptoms are severe or persistent.

#### In case of skin contact

Immediately wash with excess soap and water. If spilled on clothing, remove all affected clothing. Consult a physician if symptoms are severe or persistent.

#### In case of eye contact

Flush eyes with water or eye wash solution as a precaution for 15 minutes. Consult a physician if symptoms are severe or persistent.

#### In case of ingestion

Only induce vomiting if recommended by medical personnel. If subject is unconscious, do not give anything by mouth. If conscious, rinse mouth with water. Consult a physician if symptoms are severe or persistent.

### 4.2 Most important symptoms and effects, both acute and delayed

All known important symptoms are described in Section 2 and/or Section 11. No other important symptoms to report.

### 4.3 Indication of any immediate medical attention and special treatment needed

No special treatment indicated. Provide treatment in accordance with exhibited symptoms.

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## SECTION 5: FIREFIGHTING MEASURES

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### 5.1 Suitable extinguishing media

Water spray, alcohol-resistant foam, dry chemical, and carbon dioxide extinguishers are suitable.

### 5.2 Unsuitable extinguishing media

No known unsuitable extinguishing media.

### 5.3 Special hazards arising from the substance

No special hazards are known to exist regarding combustion of this product.

### 5.4 Advice for firefighters

Wear protective gear, such as self-contained breathing apparatus, if necessary.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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### 6.1 Personal precautions, protective equipment and emergency procedures

Provide suitable ventilation. Use any necessary personal protective equipment. Avoid contact with skin and eyes, and avoid creation and inhalation of vapor or dust. Keep all unnecessary personnel away.

**For personal protection see section 8**

### 6.2 Environmental precautions

Prevent product from entering public sewers and waterways.

### 6.3 Methods and material for containment and cleaning up

Use inert absorbent material to absorb any spilled or leaked product. Keep in suitable, closed containers for disposal.

**For proper disposal see section 13**

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## SECTION 7: HANDLING AND STORAGE

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### 7.1 Precautions for safe handling

Provide suitable ventilation. Wear any necessary personal protective equipment.

**For precautions see section 2**

### 7.2 Conditions for safe storage, including any incompatibilities

Storage conditions : Store upright, closed container in arid, ventilated environment.  
Storage Temperature: -20°C

Incompatible materials : Not Available

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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### 8.1 Control parameters

This product is not known to contain any substances with occupational exposure limit values.

### 8.2 Engineering controls

Follow good industrial hygiene and safety practices when handling product.

### 8.3 Personal protective equipment

Eye/face protection : Use only government-approved safety glasses with side-shields.

Skin protection : Use gloves when handling product. Inspect gloves before use to ensure suitability for use. Remove without exposing skin to the gloves outer surface. Discard used gloves according to all pertinent laws and/or current good practices (cGXP). Wash hands with soap and water.

Body protection : Wear appropriate clothing. Ensure clothing is in good condition, with no holes or tears. When selecting clothing, consider the concentration and amount of substance to be handled.

Respiratory protection : Use only approved respirators and components which comply with CDC and NIOSH (US) or CEN (EU) regulations. Required only when vapors or aerosols are created.

Control of environmental exposure : Prevent product from entering the environment, especially through public sewers or waterways.

General hygiene considerations : Comply with general industrial hygiene practice guidelines.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1 Information on basic physical and chemical properties

a) Appearance : Clear, Colorless

|           |   |                 |
|-----------|---|-----------------|
| <b>b)</b> | Physical states                               | : Liquid        |
| <b>c)</b> | Odor  | : Not available |
| <b>d)</b> | Odor threshold                                | : Not available |
| <b>e)</b> | Melting point                                 | : Not available |
| <b>f)</b> | Boiling point range                           | : Not available |
| <b>g)</b> | pH  | : Not available |
| <b>h)</b> | Density                                       | : Not available |
| <b>i)</b> | Flash point                                   | : Not available |
| <b>j)</b> | Evaporation rate                              | : Not available |
| <b>k)</b> | Flammability                                  | : Not available |
| <b>l)</b> | Upper/lower flammability or explosive limits: | : Not available |
| <b>m)</b> | Vapor pressure                                | : Not available |
| <b>n)</b> | Vapor density                                 | : Not available |
| <b>o)</b> | Relative density                              | : Not available |
| <b>p)</b> | Water solubility                              | : Not available |
| <b>q)</b> | Partition coefficient:n-octanol/water         | : Not available |
| <b>r)</b> | Autoignition temperature                      | : Not available |
| <b>s)</b> | Decomposition temperature                     | : Not available |
| <b>t)</b> | Kinematic viscosity                           | : Not available |
| <b>u)</b> | Explosive properties                          | : Not available |
| <b>v)</b> | Oxidizing properties                          | : Not available |
| <b>w)</b> | Solubility in other solvents                  | : Not available |
| <b>x)</b> | Surface tension                               | : Not available |

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## **SECTION 10: STABILITY AND REACTIVITY**

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### **10.1 Reactivity**

No special reactivity is known.

### **10.2 Chemical stability**

Product is stable when stored and used as recommended.

### **10.3 Stability note(s)**

No special or unusual instability known.

### **10.4 Polymerization**

No known polymerization.

### **10.5 Possibility of hazardous reactions**

No hazardous reactions are known.

### **10.6 Incompatible materials**

Not available.

### **10.7 Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### 11.1 Acute toxicity

LD50 Oral : Rat - 430 mg/kg (Streptomycin Sulfate)  
Rat - 6916 mg/kg (Penicillin G Sodium Salt)

LD50 Dermal : No toxicity data available.

LC50 Inhalation : No toxicity data available.

### 11.2 Skin corrosion/irritation

No skin/corrosion irritation data available.

### 11.3 Serious eye damage/eye irritation

No eye damage/irritation data available.

### 11.4 Respiratory or skin sensitization

Can cause sensitization through inhalation and/or skin contact.

### 11.5 Germ cell mutagenicity

No mutagenicity data available.

### 11.6 Carcinogenicity

IARC : Product and components are not regulated by IARC.

ACGIH : Product and components are not regulated by ACGIH.

NTP : Product and components are not regulated by NTP.

OSHA : Product and components are not regulated by OSHA.

### 11.7 Reproductive toxicity

May cause adverse reproductive effects such as birth defects, miscarriages, or infertility.

### 11.8 Specific target organ toxicity – single exposure

No specific organ toxicity data available

### 11.9 Specific target organ toxicity – repeated exposure

No specific organ toxicity data available.

### 11.10 Aspiration hazard

No aspiration hazard data available.

### 11.11 Additional Information

RTECS: No RTECS data available.

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## SECTION 12: ECOLOGICAL INFORMATION

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### 12.1 Toxicity

No ecological toxicity data available.

### 12.2 Aquatic toxicity

No aquatic toxicity data available.

### 12.3 Persistence and degradability

No persistence/degradability data available.

#### **12.4 Bioaccumulative potential**

No bioaccumulation data available.

#### **12.5 Mobility in soil**

No soil mobility data available

#### **12.6 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment is not required/was not conducted.

#### **12.7 Other adverse effect**

Very toxic to the aquatic environment.

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### **SECTION 13: DISPOSAL CONSIDERATIONS**

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#### **13.1 Product**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult and adhere to local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

#### **13.2 Packaging**

Packaging should be disposed of in the same manner as unused product.

#### **13.3 Recommendation**

Disposal must be made according to official regulations.

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### **SECTION 14: TRANSPORTATION INFORMATION**

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#### **14.1 DOT (US)**

Not a dangerous good under DOT(US) regulations.

#### **14.2 IMDG**

Not a dangerous good under IMDG regulations.

#### **14.3 IATA**

Not a dangerous good under IATA regulations.

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### **SECTION 15: REGULATORY INFORMATION**

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#### **15.1 SARA**

SARA 302: This product and components are not subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This product does not contain any components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

SARA 311/312: Acute Health Hazard, Chronic Health Hazard.

#### **15.2 Clean water act (CWA)**

No chemicals are present in this product that are subject to regulation under the Clean Water Act.

#### **15.3 Right to know components**

Massachusetts : No chemicals are present which require disclosure under the Massachusetts Right to Know Act.

|  |   |
|--|---|
| Pennsylvania                               | : Streptomycin Sulfate CAS No.: 3810-74-0<br>Sodium [2S-(2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ )]-3,3-dimethyl-7-oxo-6<br>(phenylacetamido)-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate CAS<br>No.: 69-57-8 |
| New Jersey                                 | : Streptomycin Sulfate CAS No.: 3810-74-0<br>Sodium [2S-(2 $\alpha$ ,5 $\alpha$ ,6 $\beta$ )]-3,3-dimethyl-7-oxo-6<br>(phenylacetamido)-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate CAS<br>No.: 69-57-8 |
| California<br>proposition 65<br>components | : This product contains chemicals which are known to the State of California<br>to cause cancer, or birth defects or other reproductive harm:<br>Streptomycin Sulfate CAS No.: 3810-74-0                    |

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## SECTION 16: OTHER INFORMATION

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### 16.1 Disclaimer

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### 16.2 Preparation Information

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