

# Material Safety Data Sheet

Penicillin and Streptomycin Solution

Cat. No: 07500

## 1 Product and Company Identification

- 1.1 Product Name:** Penicillin and Streptomycin Solution
- 1.2 Catalogue Number:** 07500
- 1.3 Synonyms:** Not Available
- 1.4 Product Use:** Cell Culture
- 1.5 Manufacturer/Supplier:** STEMCELL Technologies Inc.  
Suite 400, 570 West 7<sup>th</sup> Avenue  
Vancouver, BC V5Z 1B3  
Canada
- 1.6 In Case of Emergency Call:** 604-877-0713
- 1.7 Date Effective:** December 09, 2011
- 1.8 Prepared By:** Quality Control

## 2 Composition / Information on Ingredients

2.1 Component	CAS No.	%W/W
Penicillin G Potassium Salt	113-98-4	10 <sup>4</sup> U/mL
Streptomycin Sulfate	3810-74-0	1

## 3 Hazards Identification

- 3.1 Emergency Overview:** This product is a potential irritant to eyes, respiratory system, and skin. This product may also be harmful if ingested. Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. Aminoglycosides are associated with significant nephrotoxicity and/or ototoxicity. Complete toxicological properties have yet to be determined.
- 3.2 Routes of Exposure:** Absorbed through skin, eye contact, inhalation, and ingestion.
- 3.3 Potential Health Effects:**
- 3.3.1 Eye:** May cause eye irritation, tearing and reddening.
- 3.3.2 Skin:** May cause minor skin irritation, defatting and dermatitis. Prolonged contact with this product may cause allergic skin sensitization. Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause minor systemic damage.
- 3.3.3 Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract. Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea and headache.
- 3.3.4 Ingestion:** May be harmful if swallowed. May cause systemic poisoning. Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.
- 3.4 Chronic Effects/Carcinogenicity:** Allergic sensitivity with chronic use. Contains a substance that is a possible reproductive system hazard based on high dose tests with laboratory animals.
- 3.5 OSHA Regulatory Status:** Not Available

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## 4 First Aid Measures

- 4.1 Eyes:** In case of contact with eyes, flush thoroughly with water for at least 15 minutes. Ensure adequate flushing by separating eyelids. Check for, and remove contact lenses. Call a physician immediately.
- 4.2 Skin:** In case of contact with skin, wash the affected area with soap and copious amounts of water. Should irritation occur, contact a physician. Remove contaminated clothing and shoes, launder.
- 4.3 Ingestion:** Do not induce vomiting and seek medical attention immediately. Wash out mouth with water and give 2 glasses of water or milk to dilute provided person is conscious. Call a physician.
- 4.4 Inhalation:** If inhaled, remove person to fresh air. If breathing becomes difficult, have a trained individual give oxygen. If not breathing, give artificial respiration. Call a physician.
- 4.5 Puncture Wounds:** Wash thoroughly with soap and water. Allow to bleed freely. Call a physician.
- 4.6 Note to Physician:** Treat symptomatically.
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## 5 Fire Fighting Measures

- 5.1 Flash Point/Method:** Not Available
- 5.2 Explosive Limits:**
- 5.2.1 Upper:** Not Available
- 5.2.2 Lower:** Not Available
- 5.3 Autoignition Temperature:** Not Available
- 5.4 Hazardous Combustion Products:** Emits toxic fumes under fire conditions.
- 5.5 Conditions of Flammability:** Not Available
- 5.6 Extinguishing Media:** Water spray, carbon dioxide, dry chemical powder or appropriate foam. Water or foam may cause frothing if the liquid is still burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.
- 5.7 Fire Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.
- 5.8 Explosion Data:**
- 5.8.1 Sensitivity to Mechanical Impact:** Not Available
- 5.8.2 Sensitivity to Static Discharge:** Not Available
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## 6 Accidental Release Measures

- 6.1 Leak and Spill Procedure:** Wear chemical-resistant gloves, respirator and rubber boots. Absorb spill and place in closed container for disposal. Ventilate and wash area thoroughly after clean-up is complete.

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## 7 Handling and Storage

- 7.1 Handling:** Should be handled by trained personnel observing good laboratory practices. Avoid breathing vapor. Avoid skin contact or swallowing. May cause allergic reaction in sensitized individuals. Avoid prolonged or repeated exposure.
- 7.2 Storage:** Store at -20°C. Keep tightly closed.

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## 8 Exposure Controls/Personal Protection

- 8.1 Engineering Controls:** Use with adequate ventilation.
- 8.2 Personal Protective Equipment:**
- 8.2.1 Respiratory Protection:** NIOSH/MSHA approved respirator when ventilation inadequate.
  - 8.2.2 Eye Protection:** Safety glasses.
  - 8.2.3 Skin Protection:** Lab coat, latex gloves.
- 8.3 General Hygiene Considerations:** Wash hands after use.
- 8.4 Exposure Limits:**
- 8.4.1 ACGIH TLV-TWA:** Not Available
  - 8.4.2 OSHA PEL-TWA:** Not Available

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## 9 Physical/Chemical Properties:

- 9.1 Appearance:** Clear, colourless liquid.
- 9.2 Odor:** None
- 9.3 Physical State:** Liquid
- 9.4 pH:** Not Available
- 9.5 Boiling Point:** Not Available
- 9.6 Melting Point:** Not Available
- 9.7 Freezing Point:** Not Available
- 9.8 Vapor Pressure:** Not Available
- 9.9 Vapor Density:** Not Available
- 9.10 Specific Gravity:** Not Available
- 9.11 Evaporation Rate:** Not Available
- 9.12 Solubility in Water:** Not Available
- 9.13 Odor Threshold:** Not Applicable
- 9.14 Coefficient of Water/Oil Distribution:** Not Available

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## 10 Stability/Reactivity:

- 10.1 Chemical Stability:** Stable under normal conditions.

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<b>10.2 Conditions to Avoid:</b>	Not Available.
<b>10.3 Incompatibility (Material to Avoid):</b>	Not Available.
<b>10.4 Hazardous Decomposition/By-Products:</b>	Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides
<b>10.5 Hazardous Polymerization:</b>	Will not occur.

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## 11 Toxicological Information

<b>11.1 Effects of Short-Term Exposure:</b>	Not Available
<b>11.2 Effects of Long-Term Exposure:</b>	Not Available
<b>11.3 Irritancy of Product:</b>	Not Available
<b>11.4 Sensitization to Product:</b>	May cause allergic respiratory reaction. May cause allergic skin reaction.
<b>11.5 Carcinogenicity:</b>	Not Available
<b>11.6 Reproductive Toxicity:</b>	Not Available
<b>11.7 Teratogenicity and Embryotoxicity:</b>	Not Available
<b>11.8 Mutagenicity:</b>	Not Available
<b>11.9 Name of Toxicologically Synergistic Products:</b>	Not Available.
<b>11.10 LD50 (specify species and route):</b>	
<b>11.11 LC50 (specify species):</b>	Not Available

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## 12 Ecological Information

12.1 Not Available. Bioconcentration is not expected to occur.

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## 13 Disposal Considerations

13.1 **Waste Disposal Method:** Disposal should be in accordance with existing practices at your institution. Observe all Federal, Provincial/State and Local Laws.

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## 14 Transport Information

### 14.1 Transport Canada

14.1.1 **PIN No.:** Not Available

### 14.2 U.S. Department of Transportation:

14.2.1 **Proper Shipping Name:** None

14.2.2 **Hazard Class:** This substance is not known to be hazardous for transport.

14.2.3 **ID. Number:** Not Available

14.2.4 **Packing Group:** Not Available

14.2.5 **Label Statement:** Not Available

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## 15 Regulatory Information

**15.1 WHMIS Classification:** DIB, D2A

**15.2 Note:** This MSDS was prepared according to the Canadian Controlled Products Regulation and contains all the information required by those regulations.

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## 16 Other Information

**16.1 Preparation Information:** Refer to PIS No. 07500.

**16.2 This MSDS has been revised in the following section(s):** 1.7, 2.1, 9.4, 9.5, 9.7, 9.8, 9.9, 9.10, 9.11, 9.12, 10.2, 10.3, 11.2, 11.6, 15.1

**16.3 Original Issue Date:** December 31, 1993.

**16.4 Notice:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StemCell Technologies Inc., shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Material Safety Data Sheet (MSDS) is current as of the Date Prepared shown in Section 1.7 of this document and may be subject to ammendment by StemCell Technologies Inc.

**16.5 Disclaimer:** **THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT USED FOR DIAGNOSTIC OR THERAPEUTIC APPLICATIONS.**