

Revision Date 31-Jul-2014

Version 1

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier**

**Product Name** Penicillin-Streptomycin Solution, 100x  
**Product Code** 30-002-CI

**Other means of identification**

**Pure substance/mixture** Mixture

**Recommended use of the chemical and restrictions on use**

**Recommended Use** For Research Use Only. Not Intended for Diagnostic or Therapeutic Use.

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

**Company Name** Mediatech Inc., A Corning Subsidiary  
 9345 Discovery Blvd.  
 Manassas, VA 20109  
 USA  
 +1.703.471.5955

**Contact Point**

**Emergency Telephone** MTtechserv@Corning.com, 1.800.CELLGRO  
 Chemtrec: +1-800-424-9300 (USA), +1-703-527-3887 (International; Call collect), (REF: CCN 56 88)

**2. HAZARDS IDENTIFICATION****Classification**

Respiratory sensitization	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2

**Label elements****Emergency Overview****Danger****Hazard statements**

H317 - May cause an allergic skin reaction  
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 H361 - Suspected of damaging fertility or the unborn child

**Appearance** clear**Physical state** liquid**Odor** No information available

**Precautionary statements**

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P285 - In case of inadequate ventilation wear respiratory protection

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P363 - Wash contaminated clothing before reuse

P501 - Dispose of contents/ container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No	Weight-%	Trade Secret
Streptomycin sulfate	3810-74-0	1 - 5	-
Penicillin G potassium salt	113-98-4	0.1 - 1	-

**4. FIRST AID MEASURES****First aid measures****Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. Call a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water. Remove contaminated clothing and shoes. Call a physician.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Ingestion**

If swallowed, rinse mouth with water (only if the person is conscious). Never give anything by mouth to an unconscious person. Call a physician.

**Most important symptoms and effects, both acute and delayed****Symptoms**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous combustion products**

Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur.

**Explosion data****Sensitivity to Mechanical Impact** None.**Sensitivity to Static Discharge** None.**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.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Avoid breathing vapors or mists.

**Environmental precautions**

Collect spillage. Prevent product from entering drains.

**Methods and material for containment and cleaning up****Methods for containment** Prevent further leakage or spillage if safe to do so.**Methods for cleaning up** Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Prevent product from entering drains.**7. HANDLING AND STORAGE****Precautions for safe handling****Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas.**Conditions for safe storage, including any incompatibilities****Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.**Incompatible materials** None known based on information supplied.**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.**Appropriate engineering controls****Engineering Controls** Ensure adequate ventilation, especially in confined areas.**Individual protection measures, such as personal protective equipment****Eye/face protection** Wear safety glasses with side shields (or goggles).**Hand Protection** Wear protective nitrile rubber gloves.**Skin and body protection** Suitable protective 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.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Odor</b>	No information available
<b>Appearance</b>	clear	<b>Odor threshold</b>	No information available
<b>Color</b>	colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No information available	No information available
<b>Melting point/freezing point</b>	No information available	No information available
<b>Boiling point / boiling range</b>	No information available	No information available
<b>Flash point</b>	No information available	No information available
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	No information available	
<b>Specific Gravity</b>	No information available	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Oxidizing properties</b>	No information available	
<b>Explosive properties</b>	No information available	

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

None known.

### Incompatible materials

Strong oxidizing agents.

### Hazardous Decomposition Products

None under normal use conditions

Thermal decomposition can lead to release of irritating and toxic gases and vapors

Carbon oxides, Nitrogen oxides (NOx), Oxides of sulfur.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

**Product Information**

No acute toxicity information is available for this product

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Streptomycin sulfate	430 mg/kg (rat)	-	-
Penicillin G potassium salt	6700 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	May cause sensitization by inhalation and skin contact.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP
<b>Reproductive toxicity</b>	Contains a known or suspected reproductive toxin.
<b>Developmental Toxicity</b>	Possible risk of harm to the unborn child.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Target Organs</b>	Ears, kidneys.
<b>Potential health effects</b>	
<b>Inhalation</b>	May be harmful if inhaled. May cause irritation of respiratory tract. May cause allergic respiratory reaction.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Skin</b>	May be harmful in contact with skin. May cause irritation.
<b>Eyes</b>	May cause eye irritation.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Streptomycin sulfate	EC50 Selenastrum capricornutum (green algae) 0.133 mg/L (72 hr)	LC50 Oncorhynchus mykiss (rainbow trout) >180mg/L (96 hr)	-	EC50 Daphnia magna (water flea) 650 mg/L (48 hr)
Penicillin G potassium salt	-	500: 96 h Leuciscus idus melanotus mg/L LC50 static	-	1000: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

Chemical Name	Partition coefficient
Penicillin G potassium salt	log Kow = 1.83

**Mobility in soil**

No information available.

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

<b>14. TRANSPORT INFORMATION</b>
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<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated
<b>RID</b>	Not regulated
<b>ADR</b>	Not regulated
<b>ADN</b>	Not regulated
<b>MEX</b>	Not regulated
<b>ICAO (air)</b>	Not regulated

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Streptomycin sulfate	X	X	-	X	-	-	X	X	X	X
Penicillin G potassium salt	X	X	-	X	-	-	-	X	X	X

*Legend* X = Listed, - = Not Listed

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any 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**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No

**Sudden release of pressure hazard** No  
**Reactive Hazard** No

**CWA (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).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not Applicable

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Streptomycin sulfate (CAS #: 3810-74-0)	Developmental

**16. OTHER INFORMATION**

Version 1

Revision Date 31-Jul-2014

Revision Note Not Applicable

**Disclaimer**

To the best of our knowledge, the information contained herein is accurate. However, neither Corning Incorporated nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

**End of Safety Data Sheet**