

Revision Date 31-Jul-2014

Version 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code 30-002-C1
 Product Name Penicillin-Streptomycin Solution, 100x
 Pure substance/mixture Mixture

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

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

1.3. Details of the supplier of the safety data sheet

Mediatech Inc., A Corning Subsidiary 30-002-C1
 9345 Discovery Blvd. Fogostraat 12
 Manassas, VA 20109 1060 LJ Amsterdam, The Netherlands
 USA +31-(0)20-6557928
 +1.703.471.5955

For further information, please contact

E-mail address ScientificSupportEMEA@Corning.com

1.4. Emergency telephone number

Emergency Telephone Chemtec: +1-800-424-9300 (USA), +1-703-527-3887 (International, Call collect), (REF: CCN 56 88)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Respiratory sensitization	Category 1 (H334)
Skin sensitization	Category 1 (H317)
Reproductive Toxicity	Category 2 (H361)

2.2. Label elements



Signal word
 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

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 and eye/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

Classification according to Directive 67/548/EEC or 1999/45/EC

Xn - Harmful

**R-Phrases**

R42/43 - May cause sensitization by inhalation and skin contact
 R63 - Possible risk of harm to the unborn child

S phrases

S22 - Do not breathe dust
 S36/37 - Wear suitable protective clothing and gloves
 S45 - In case of accident or if you feel unwell, seek medical advice immediately

2.3. Other hazards

None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

Chemical Name	EC No	CAS No	Weight-%	Classification according to 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Streptomycin sulfate	223-286-0	3810-74-0	1-5	Xn; R22-R63	Acute Toxicity 4 (H302) Reproductive Toxicity 2 (H361)
Penicillin G potassium salt	204-038-0	113-98-4	0.1-1	Xn; R42/43	Respiratory Sensitization 1 (H334) Skin Sensitization 1 (H317)

The substance does not require registration according to REACH.

Full text of R-phrases: see section 16 .

Full text of H- and EUH-phrases: see section 16 .

Section 4: FIRST AID MEASURES**4.1. Description of 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.

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

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

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

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

No information available.

5.2. Special hazards arising from the substance or mixture

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

Hazardous combustion products

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

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

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

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Collect spillage. Prevent product from entering drains.

6.3. 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.

6.4. Reference to other sections

See Section 13: DISPOSAL CONSIDERATIONS, Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 7: HANDLING AND STORAGE

7.1. 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.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

This product is for research and development only.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling.

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	In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Environmental exposure controls Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid		
Appearance	clear	Odor	No information available
Color	colorless	Odor threshold	No information available
Property	Values	Remarks - Method	
pH	No information available	No information available	
Melting point/freezing point	No information available	No information available	
Boiling point / boiling range	No information available	No information available	
Flash point	No information available	No information available	
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	No information available		
Water solubility	Soluble in water		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		

Oxidizing properties No information available

9.2. Other information

No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. 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.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

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)	-	-

Sensitization

May cause sensitization by inhalation and skin contact.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available

Reproductive toxicity

Contains a known or suspected reproductive toxin.

Developmental Toxicity

Possible risk of harm to the unborn child.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

Target Organs

Ears, kidneys.

Potential health effects

Inhalation

May be harmful if inhaled. May cause irritation of respiratory tract. May cause allergic respiratory reaction.

Ingestion

May be harmful if swallowed.

Skin

May be harmful in contact with skin. May cause irritation.

Eyes

May cause eye irritation.

Symptoms

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

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical Name	Algae/aquatic plants	Fish	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

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN/ID No.	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not Applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

RID

14.1 UN/ID No.	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not Applicable
14.6 Special Provisions	None

ADR

14.1 UN/ID No.	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not Applicable
14.6 Special Provisions	None

ICAO (air)

14.1 UN/ID No.	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not Applicable
14.6 Special Provisions	None

IATA

14.1 UN/ID No.	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not Applicable
14.6 Special Provisions	None

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.

Water hazard class (WGK) Water endangering class = 2 (self classification)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

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

15.2. Chemical safety assessment.

No information available

Section 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R22 - Harmful if swallowed

R42/43 - May cause sensitization by inhalation and skin contact

R63 - Possible risk of harm to the unborn child

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

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

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31-Jul-2014

Revision Note

Not Applicable.

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006

Disclaimer

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End of Safety Data Sheet