PAGE #:1 OF 7	PRODUCT SAFETY DATA SHEET	ISSUE DATE:	REV.:1
	MELFORD LABORATORIES LTD	12/15/14	REV Date :11/25/15
According to regulation (EC) No. 1272/2008	PRODUCT NAME: Penicillin/Streptomycin/Neom	ycin Solution	Product Code: P93580

SECTION 1 - CHEMICAL IDENTIFICATION

PRODUCT NAME:	Penicillin/Streptomycin/Neomycin Solution
CATALOG #:	P93580
SUPPLIER'S NAME:	Melford Laboratories Ltd
SUPPLIERS ADDRESS:	Bildeston Road, Chelsworth, Ipswich, IP7 7LE, UK
EMERGENCY CONTACT:	01449 741178
OTHER INFORMATION:	support@melford.co.uk

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

H317	Skin Sensitisation	Category 1
H334	Respiratory Sensitisation	Category 1
H361	Reproductive toxicity	Category 2
H373	Specific target organ toxicity, repeated exposure	Category 2

2.2 GHS Label elements, including Hazard and Precautionary Statement(s)

Pictogram



Signal word: Danger

Hazard statement(s)

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
H373	May cause damage to organs prolonged or repeated exposure

Prevention, Response, Storage and Disposal Precautionary Statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

PAGE #:2 OF 7	PRODUCT SAFETY DATA SHEET	ISSUE DATE:	REV.:1
	MELFORD LABORATORIES LTD	12/15/14	REV Date :11/25/15
According to regulation (EC) No. 1272/2008	PRODUCT NAME: Penicillin/Streptomycin/Neomycin Solution		Product Code: P93580

P284	Wear respiratory protection
P285	In case of inadequate ventilation wear respiratory protection
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	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.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see. on this label).
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.
P362 + P364	Take off contaminated clothing and wash before reuse.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Weight %	
Water	7732-18-5	97.0-98.0	
Neomycin sulfate	1405-10-3	1.0	
Streptomycin sulfate	3810-74-0	0.50	
Penicillin G, sodium salt	69-57-8	0.30-0.60	
Sodium Chloride	7647-14-5	0.90	

SECTION 4 - FIRST-AID MEASURES

4.1 Description of first aid measures

General advice: Consult a doctor and show this safety data sheet.

- i. **If inhaled:** Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.
- ii. **In case of skin contact:** Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.
- iii. In case of eye contact: Flush with copious amounts of water for at least 15 minutes. Consult a doctor.
- iv. **If swallowed:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed: Show this safety data sheet to

PAGE #:3 OF 7	PRODUCT SAFETY DATA SHEET	ISSUE DATE:	REV.:1
	MELFORD LABORATORIES LTD	12/15/14	REV Date :11/25/15
According to regulation (EC) No. 1272/2008	PRODUCT NAME: Penicillin/Streptomycin/Neom	ycin Solution	Product Code: P93580

the doctor in attendance. Immediate medical attention is required.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture: Carbon oxides, nitrogen oxides (NOx), Sulfur oxides, Sodium oxides

5.3 Precautions for fire-fighters: Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

5.4 Further information: No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Cover spillage with suitable absorbent material. Using non-spark tools, sweep up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections: For required PPE see section 8. For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling: Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep in a dry place. Store in freezer. Keep at -20°C.

7.3 Specific end use(s): Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters: No Data Available

8.2 Exposure Controls

i. **Appropriate engineering controls:** Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

8.3 Personal protective equipment

i. **Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

PAGE #:4 OF 7	PRODUCT SAFETY DATA SHEET	ISSUE DATE:	REV.:1
	MELFORD LABORATORIES LTD	12/15/14	REV Date :11/25/15
According to regulation (EC) No. 1272/2008	PRODUCT NAME: Penicillin/Streptomycin/Neom	ycin Solution	Product Code: P93580

- ii. **Skin protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166
- iii. **Body Protection:** Wear appropriate protective clothing. Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- iv. Respiratory Protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
- v. Control of environmental exposure: Do not let product enter drains

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid	Vapor Pressure	No Data Available
Odor	No Data Available	Vapor Density	No Data Available
Odor Threshold	No Data Available	Relative Density	No Data Available
pH	No Data Available	Water Solubility	No Data Available
Melting / Freezing Point	No Data Available	Partition Coefficient	No Data Available
Initial Boiling Point Range	No Data Available	Auto-Ignition Temperature	No Data Available
Flash Point	No Data Available	Decomposition Temperature	No Data Available
Evaporation Rate	No Data Available	Viscosity	No Data Available
Flammability (Solid, Gas)	No Data Available	Explosive Properties	No Data Available
Upper / Lower Flammability Or Explosive Limits	No Data Available	Oxidizing Properties	No Data Available

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.
Hazardous Decomposition Products: No Data Available.
Hazardous Polymerization: No Data Available.
Incompatibilities: Acids, Heavy metal salts, Strong oxidizers, Alcohols and Glycerol.
Conditions to avoid: Exposure to moisture may affect product quality.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity				
Component	LD50 Oral	LD50Dermal	LC50 inhalation	
Sodium chloride	3 g/kg (Rat)	Not Listed	42 g/m³(Rat) 1 h	
Streptomycin sulfate	430 mg/kg (Rat)	Not Listed	Not Listed	
Penicillin G, sodium salt	6916 mg/kg (Rat)	Not Listed	Not Listed	

PAGE #:5 OF 7	PRODUCT SAFETY DATA SHEET	ISSUE DATE:	REV.:1
	MELFORD LABORATORIES LTD	12/15/14	REV Date :11/25/15
According to regulation (EC) No. 1272/2008	PRODUCT NAME: Penicillin/Streptomycin/Neom	ycin Solution	Product Code: P93580

SECTION 12 - ECOLOGICAL INFORMATION

Eco Toxicity: This product contains the following substance(s) which are hazardous for the environment.

Component	Freshwater Fish	Water Flea
Sodium chloride	Pimephals prome: LC50:7650 mg/L/96h	EC50: 1000 mg/L/48h

Persistence and degradability: No data available Bioaccumlative potential: No data available

Mobility in Soil

Component	log Pow
L-Glutamine	-4.609

Results of PBT and vPvB assessment: No data available

Other adverse effects: No data available

Chronic Toxicity: There are no known carcinogenic chemicals in this product

SECTION 13 - DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 - TRANSPORT INFORMATION

DOT	TDG	ΙΑΤΑ	IMDG/IMO
Not regulated	Not regulated	Not regulated	Not regulated

SECTION 15 - REGULATORY INFORMATION

INTERNATIONAL INVENTORIES

Compon	Component: Water			CAS #	CAS #:7732-18-5			EINECS:231-791-2		
TSCA	DSL	NDSL	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL	
Listed	Listed	-	-	-	Listed	-	Listed	Listed	Listed	

Compon	ent: Strep	ent: Streptomycin Sulfate CAS #:3810-74-0)	EINECS:223-286-0				
TSCA	DSL	NDSL	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Listed	Listed	-	-	-	Listed	-	Listed	Listed	Listed

PAGE #:6 OF 7	PRODUCT SAFETY DATA SHEET	ISSUE DATE:	REV.:1
	MELFORD LABORATORIES LTD	12/15/14	REV Date :11/25/15
According to regulation (EC) No. 1272/2008	PRODUCT NAME: Penicillin/Streptomycin/Neom	ycin Solution	Product Code: P93580

Component: Penicillin G, Sodium Salt			CAS #	CAS #:69-57-8			EINECS:200-710-2		
TSCA	DSL	NDSL	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
-	Listed	-	-	-	-	I	Listed	Listed	Listed

Compon	Component: Sodium Chloride		CAS #	CAS #:7647-14-5			EINECS:231-598-3		
TSCA	DSL	NDSL	ELINCS	NLP	NLP PICCS ENCS		AICS	CHINA	KECL
Listed	Listed	-	-	-	Listed	Listed	Listed	Listed	Listed

Component: Neomycin Sulfate		CAS #	CAS #:1405-10-3			EINECS:215-773-1			
TSCA	DSL	NDSL	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Listed	Listed	-	-	-	Listed	-	Listed	Listed	Listed

USA FEDERAL REGULATION

SARA 311/312 HAZARDOUS CATEGORIZATION

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

TSCA 12(b): Not Applicable SARA 313: Not Applicable Clean Water Act/ Clean Air Act: Not Applicable OSHA/ CERCLA: Not Applicable

California Proposition 65: This product contains the following Proposition 65 chemicals

Component	CAS#	California Prop. 65	Prop 65 NSRL
Streptomycin Sulfate	3810-74-0	Developmental	-
Neomycin Sulfate	1405-10-3	Developmental	-

HMIS Rating					
Health hazard	Chronic Health Hazard	Flammability	Physical Hazard		
2	*	0	0		

NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
2	0	0

STATE RIGHT TO KNOW

Massachusetts New Jersey Pennsylvania Illinois Rhode Island

PAGE #:7 OF 7	PRODUCT SAFETY DATA SHEET MELFORD LABORATORIES LTD		ISSUE DATE: 12/15/14	REV.:1 REV Date :11/25/15
According to regulation (EC) No. 1272/2008	PRODUCT NAME: Penicillin/Streptomycin/Neomycin Solution			Product Code: P93580
_	Listed	Listed	_	-

US DEPARTMENT OF TRANSPORTATION

REPORTABLE QUANTITY (RQ)	DOT MARINE POLLUTANT	DOT SEVER MARINE POLLUTANT
Νο	Νο	Νο

U.S. DEPARTMENT OF HOMELAND SECURITY: This product does not contain any DHS chemicals.

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

This SDS complies with the requirements of Regulation (EC).

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Melford Laboratories Ltd shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. This product is sold for laboratory research and development purposes use only.