

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Identification of the substance or mixture

**Product code** 32571036  
**Product name** MEM ALPHA

### Company/undertaking identification

Life Technologies Corporation  
5781 Van Allen Way  
PO Box 6482  
Carlsbad, CA 92008  
+1 760 603 7200

Life Technologies  
5250 Mainway Drive  
Burlington, ONT  
CANADA L7L 6A4  
800/263-6236

### **24 hour Emergency Response:**

866-536-0631  
301-431-8585  
Outside of the U.S. +1-301-431-8585

### **Country specific Emergency Number (if available):**

CHEMTREC Brazil (Rio De Janeiro) +(55)-2139581449 (português)

### **For in vitro diagnostic use.**

## SECTION 2: Hazards identification

### GHS - Classification

#### Signal Word

None

#### Health hazards

Not classified

#### Physical hazards

Not classified

#### Hazard Statements

Not Applicable

#### Precautionary Statements

Not Applicable

#### Principle Routes of Exposure

#### Potential Health Effects

eyes

May cause eye irritation with susceptible persons.

**Skin** May cause skin irritation in susceptible persons.  
**inhalation** May be harmful by inhalation.  
**Ingestion** May be harmful if swallowed.

**Specific effects**

**Carcinogenic effects** None.  
**Mutagenic effects** None.  
**Reproductive toxicity** None.  
**Sensitization** None.

**Target Organ Effects** No known effects under normal use conditions.

**HMIS**

Health	0
Flammability	0
Reactivity	0

**SECTION 3: Composition/information on ingredients**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**SECTION 4: First aid measures**

**Skin contact** Rinse cautiously with water for several minutes. Immediate medical attention is not required.  
**Eye contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
**Ingestion** Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.  
**inhalation** Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.  
**Most important symptoms and effects, both acute and delayed**  
Not Applicable

**Notes to Physician** Treat symptomatically.

**SECTION 5: Firefighting measures**

**Suitable extinguishing media** Water spray. Carbon dioxide (CO2). Foam. Dry chemical.  
**Special protective equipment for firefighters** Standard procedure for chemical fires.  
**Specific hazards arising from the chemical** Not known

**SECTION 6: Accidental release measures**

**Personal precautions** Always wear recommended Personal Protective Equipment. Use personal protection equipment.  
**Methods for cleaning up** Soak up with inert absorbent material.

**Environmental precautions**

No special environmental precautions required.

See Section 12 for more information.

## SECTION 7: Handling and storage

<b>Handling</b>	Always wear recommended Personal Protective Equipment. No special handling advices are necessary.
<b>Storage</b>	Keep in a dry, cool and well-ventilated place.

## SECTION 8: Exposure controls/personal protection

### Exposure Limits

We are not aware of any national exposure limit.

**Engineering measures** Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection** Impervious gloves.

**Eye protection** Wear safety glasses with side shields (or goggles).

**Skin and Body Protection** Lightweight protective clothing.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No special environmental precautions required.

## SECTION 9: Physical and chemical properties

### General information

<b>Form</b>	Liquid	
<b>Appearance</b>	No data available	
<b>Odor</b>	No data available	
<b>Odor Threshold</b>	No data available	
<b>Boiling point / boiling range</b>	°C No data available	°F No data available
<b>Melting point / melting range</b>	°C No data available	°F No data available
<b>flash point</b>	°C No data available	°F No data available
<b>Autoignition Temperature</b>	°C No data available	°F No data available
<b>Evaporation rate</b>	No data available	
<b>Flammability (solid, gas)</b>	No data available	
<b>Oxidizing properties</b>	No data available	
<b>Water solubility</b>	No data available	
<b>Upper explosion limit</b>	No data available	
<b>Lower explosion limit</b>	No data available	
<b>Partition coefficient: n-octanol/water</b>	No data available	
<b>Vapor Pressure</b>	No data available	
<b>vapor density</b>	No data available	
<b>Viscosity</b>	No data available	
<b>pH value</b>	6-8	

## SECTION 10: Stability and reactivity

<b>Stability</b>	Stable under normal conditions.
<b>Materials to avoid</b>	No dangerous reaction known under conditions of normal use.
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported
<b>Hazardous decomposition products</b>	None under normal use conditions.
<b>polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None under normal processing.

## SECTION 11: Toxicological information

### Acute Toxicity

No toxicology information is available.

### Principle Routes of Exposure

#### Potential Health Effects

<b>eyes</b>	May cause eye irritation with susceptible persons.
<b>Skin</b>	May cause skin irritation in susceptible persons.
<b>inhalation</b>	May be harmful by inhalation.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Carcinogenic effects</b>	None.
<b>Mutagenic effects</b>	None.
<b>Reproductive toxicity</b>	None.
<b>Sensitization</b>	None.

## SECTION 12: Ecological information

<b>Ecotoxicity</b>	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
<b>Mobility</b>	No information available.
<b>Biodegradation</b>	No information available.
<b>Bioaccumulation</b>	No information available.

## SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

## SECTION 14: Transport information

### IATA

Revision date 19-Apr-2016  
Product code 32571036

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Product name MEM ALPHA

<b>Proper Shipping Name</b>	No dangerous good in sense of these transport regulations
<b>Hazard Class</b>	None
<b>Subsidiary class</b>	None
<b>Packing group</b>	None
<b>UN-No</b>	None
<b>Environmental hazards</b>	None

SECTION 15: Regulatory information

**US Federal Regulations**

**SARA 313**

This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contains HAPs.

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class**

Non-controlled

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

SECTION 16: Other information

**Reason for revision**                      SDS sections updated.

For in vitro diagnostic use.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"

**End of Safety Data Sheet**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Identification of the substance or mixture**

**Product code** 15140148  
**Product name** Penicillin-Streptomycin, liquid

**Company/undertaking identification**

Life Technologies  
 5791 Van Allen Way  
 PO Box 6482  
 Carlsbad, CA 92008  
 +1 760 603 7200

Life Technologies  
 5250 Mainway Drive  
 Burlington, ONT  
 CANADA L7L 6A4  
 800/263-6236

**24 hour Emergency Response:** 866-536-0631  
 301-431-8585  
 Outside of the U.S. +1-301-431-8585

**For research use only. Not intended for human or animal diagnostic or therapeutic uses.**

SECTION 2: Hazards identification

**GHS - Classification**

**Signal Word**  
 DANGER



**Health hazards**

Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ systemic toxicity (single exposure)	Category 2
Reproductive Toxicity	Category 1A

**Physical hazards**

Not Hazardous

### Hazard Statements

H317 - May cause an allergic skin reaction  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H360 - May damage fertility or the unborn child  
H371 - May cause damage to organs  
H402 - Harmful to aquatic life

### Precautionary Statements

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P308 + P313 - IF exposed or concerned: Get medical advice/attention  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection

### Principle Routes of Exposure

#### Potential Health Effects

**eyes** May cause eye irritation with susceptible persons.  
**Skin** May cause skin irritation in susceptible persons.  
**inhalation** No information available.  
**Ingestion** No information available.

#### Specific effects

**Carcinogenic effects** None  
**Mutagenic effects** None  
**Reproductive toxicity** May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility  
**Sensitization** R43 - May cause sensitization by skin contact R42 - May cause sensitization by inhalation

**Target Organ Effects** None under normal use conditions

### HMIS

Health	3 * Chronic Hazard
Flammability	0
Reactivity	0

### SECTION 3: Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
STREPTOMYCIN SULFATE	3810-74-0	-	0.5-1.5
Penicillin G Sodium Salt	69-57-8	-	0.1-1

We recommend handling all chemicals with caution.

### SECTION 4: First aid measures

**Skin contact** Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing and wash it before reuse. Immediate medical attention is required.

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Product name Penicillin-Streptomycin, liquid

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.
<b>inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately.
<b>Notes to Physician</b>	Treat symptomatically.

**SECTION 5: Firefighting measures**

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
<b>Special protective equipment for firefighters</b>	Wear self-contained breathing apparatus and protective suit.

**SECTION 6: Accidental release measures**

<b>Personal precautions</b>	Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protection equipment.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material.

**Environmental precautions**

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

See Section 12 for more information.

**SECTION 7: Handling and storage**

<b>Handling</b>	Always wear recommended Personal Protective Equipment. No special handling advices are necessary.
<b>Storage</b>	Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

**SECTION 8: Exposure controls/personal protection**

**Exposure Limits**

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
<b>STREPTOMYCIN SULFATE</b>	None	None	None	None
<b>Penicillin G Sodium Salt</b>	None	None	None	None

<b><u>Engineering measures</u></b>	Ensure adequate ventilation, especially in confined areas.
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**Personal Protective Equipment**

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection** Impervious gloves.

**Eye protection** Wear safety glasses with side shields (or goggles).

**Skin and Body Protection** Lightweight protective clothing.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.



**Environmental exposure controls**

Prevent product from entering drains. Do not allow material to contaminate ground water system.

SECTION 9: Physical and chemical properties

**General information**

<b>Form</b>	Liquid
<b>Appearance</b>	No information available
<b>Odor</b>	Mixture has not been tested
<b>Odor Threshold</b>	Mixture has not been tested
<b>Boiling point / boiling range</b>	°C No data available °F No data available
<b>Melting point / melting range</b>	°C No data available °F No data available
<b>flash point</b>	°C No data available °F No data available
<b>Autoignition Temperature</b>	°C No data available °F No data available
<b>Oxidizing properties</b>	Mixture has not been tested
<b>Water solubility</b>	soluble
<b>Viscosity</b>	Mixture has not been tested

SECTION 10: Stability and reactivity

<b>Stability</b>	Stable under normal conditions.
<b>Materials to avoid</b>	No information available.
<b>Hazardous decomposition products</b>	No information available.
<b>polymerization</b>	None under normal processing.

SECTION 11: Toxicological information

**Acute Toxicity**

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
STREPTOMYCIN SULFATE	No data available	No data available	No data available
Penicillin G Sodium Salt	No data available	No data available	No data available

**Principle Routes of Exposure**

**Potential Health Effects**

<b>eyes</b>	May cause eye irritation with susceptible persons
<b>Skin</b>	May cause skin irritation in susceptible persons
<b>inhalation</b>	No information available
<b>Ingestion</b>	No information available
<b>Carcinogenic effects</b>	None
<b>Mutagenic effects</b>	None
<b>Reproductive toxicity</b>	May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility.
<b>Sensitization</b>	R43 - May cause sensitization by skin contact R42 - May cause sensitization by inhalation
<b>Target Organ Effects</b>	None under normal use conditions

SECTION 12: Ecological information

<b>Ecotoxicity</b>	No information available
<b>Acute aquatic toxicity</b>	Category 3
<b>Mobility</b>	No information available
<b>Biodegradation</b>	No information available
<b>Bioaccumulation</b>	No information available

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

**IATA**

<b>Proper Shipping Name</b>	No dangerous good in sense of these transport regulations
<b>Hazard Class</b>	None
<b>Subsidiary class</b>	None
<b>Packing group</b>	None
<b>UN-No</b>	none

## SECTION 15: Regulatory information

Component	TSCA
STREPTOMYCIN SULFATE 3810-74-0 ( 0.5-1.5 )	Listed
Penicillin G Sodium Salt 69-57-8 ( 0.1-1 )	-

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

This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contains HAPs.

**US State Regulations**

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
STREPTOMYCIN SULFATE	-	-	-	-	-
Penicillin G Sodium Salt	-	-	-	-	-

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	CAS-No	Weight %	Category
STREPTOMYCIN SULFATE	3810-74-0	0.5-1.5	Developmental

**WHMIS Hazard Class**

D2B - Toxic materials



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

## SECTION 16: Other information

**Reason for revision** SDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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**End of Safety Data Sheet**

Revision date 06-Feb-2015  
Product code 15140148

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Product name Penicillin-Streptomycin, liquid

SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Identification of the substance or mixture**

Product code                      15240096  
 Product name                    Antibiotic Antimycotic

**Company/undertaking identification**

Life Technologies Corporation  
 5781 Van Allen Way  
 PO Box 6482  
 Carlsbad, CA 92008  
 +1 760 603 7200

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**Country specific Emergency Number (if available):**

CHEMTREC Brazil (Rio De Janeiro)      +(55)-2139581449 (português)

**For Research Use Only. Not for use in diagnostic procedures.**

SECTION 2: Hazards identification

**GHS - Classification**

**Signal Word**

WARNING



**Health hazards**

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1

**Physical hazards**

Not classified

**Hazard Statements**

H315 - Causes skin irritation  
 H319 - Causes serious eye irritation

H317 - May cause an allergic skin reaction

### **Precautionary Statements**

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P332 + P313 - If skin irritation occurs: Get medical advice/attention

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

P264 - Wash hands thoroughly after handling

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

### **Principle Routes of Exposure**

#### **Potential Health Effects**

<b>eyes</b>	Irritating to eyes.
<b>Skin</b>	Irritating to skin.
<b>inhalation</b>	May be harmful by inhalation.
<b>Ingestion</b>	May be harmful if swallowed.

#### **Specific effects**

<b>Carcinogenic effects</b>	None.
<b>Mutagenic effects</b>	None.
<b>Reproductive toxicity</b>	None.
<b>Sensitization</b>	May cause sensitization by inhalation and skin contact.

<b>Target Organ Effects</b>	No known effects under normal use conditions.
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### **HMIS**

Health	0
Flammability	0
Reactivity	0

## SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Penicillin G Sodium Salt 69-57-8 ( 0.5 - 1.5 )	69-57-8	-	0.5 - 1.5
Streptomycin sulfate 3810-74-0 ( 0.5 - 1.5 )	3810-74-0	223-286-0	0.5 - 1.5

We recommend handling all chemicals with caution.

## SECTION 4: First aid measures

<b>Skin contact</b>	Rinse cautiously with water for several minutes. Immediate medical attention is not required.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
<b>Ingestion</b>	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
<b>inhalation</b>	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
<b>Most important symptoms and effects, both acute and delayed</b>	

Revision date 14-Jan-2016  
Product code 15240096

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Product name Antibiotic Antimycotic

H315 - Causes skin irritation, H319 - Causes serious eye irritation, H317 - May cause an allergic skin reaction

**Notes to Physician** Treat symptomatically.

SECTION 5: Firefighting measures

**Suitable extinguishing media** Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical.  
**Special protective equipment for firefighters** Standard procedure for chemical fires.  
**Specific hazards arising from the chemical** Not known

SECTION 6: Accidental release measures

**Personal precautions** Always wear recommended Personal Protective Equipment. Use personal protection equipment.  
**Methods for cleaning up** Soak up with inert absorbent material.

**Environmental precautions**

No special environmental precautions required.

See Section 12 for more information.

SECTION 7: Handling and storage

**Handling** Always wear recommended Personal Protective Equipment. No special handling advices are necessary.  
**Storage** Keep in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

**Exposure Limits**

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Penicillin G Sodium Salt	None	None	None	None
Streptomycin sulfate	None	None	None	None

**Engineering measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection** Impervious gloves.

**Eye protection** Wear safety glasses with side shields (or goggles).

**Skin and Body Protection** Lightweight protective clothing.

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No special environmental precautions required.

SECTION 9: Physical and chemical properties

## General information

<b>Form</b>	Liquid	
<b>Appearance</b>	No data available	
<b>Odor</b>	No data available	
<b>Odor Threshold</b>	No data available	
<b>Boiling point / boiling range</b>	°C No data available	°F No data available
<b>Melting point / melting range</b>	°C No data available	°F No data available
<b>flash point</b>	°C No data available	°F No data available
<b>Autoignition Temperature</b>	°C No data available	°F No data available
<b>Evaporation rate</b>	No data available	
<b>Flammability (solid, gas)</b>	No data available	
<b>Oxidizing properties</b>	No data available	
<b>Water solubility</b>	No data available	
<b>Upper explosion limit</b>	No data available	
<b>Lower explosion limit</b>	No data available	
<b>Partition coefficient: n-octanol/water</b>	No data available	
<b>Vapor Pressure</b>	No data available	
<b>vapor density</b>	No data available	
<b>Viscosity</b>	No data available	
<b>pH value</b>	No data available	
<b>PH Range</b>	6-8	

## SECTION 10: Stability and reactivity

<b>Stability</b>	Stable under normal conditions.
<b>Materials to avoid</b>	No dangerous reaction known under conditions of normal use.
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported
<b>Hazardous decomposition products</b>	None under normal use conditions.
<b>polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None under normal processing.

## SECTION 11: Toxicological information

### Acute Toxicity

<b>Chemical Name</b>	<b>LD50 (oral, rat/mouse)</b>	<b>LD50 (dermal, rat/rabbit)</b>	<b>LC50 (inhalation, rat/mouse)</b>
Penicillin G Sodium Salt	= 6916 mg/kg (Rat)	No data available	No data available
Streptomycin sulfate	= 430 mg/kg (Rat)	No data available	No data available

### Principle Routes of Exposure

#### Potential Health Effects

<b>eyes</b>	Irritating to eyes.
<b>Skin</b>	Irritating to skin.
<b>inhalation</b>	May be harmful by inhalation.
<b>Ingestion</b>	May be harmful if swallowed.

<b>Carcinogenic effects</b>	None.
<b>Mutagenic effects</b>	None.
<b>Reproductive toxicity</b>	None.
<b>Sensitization</b>	May cause sensitization by inhalation and skin contact.

SECTION 12: Ecological information

<b>Ecotoxicity</b>	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
<b>Mobility</b>	No information available.
<b>Biodegradation</b>	Inherently biodegradable.
<b>Bioaccumulation</b>	Material does not bioaccumulate.

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

<b>IATA</b>	
<b>Proper Shipping Name</b>	No dangerous good in sense of these transport regulations
<b>Hazard Class</b>	None
<b>Subsidiary class</b>	None
<b>Packing group</b>	None
<b>UN-No</b>	None
<b>Environmental hazards</b>	None



## SECTION 15: Regulatory information

Component	US TSCA
Penicillin G Sodium Salt 69-57-8 ( 0.5 - 1.5 )	-
Streptomycin sulfate 3810-74-0 ( 0.5 - 1.5 )	Listed

### US Federal Regulations

#### **SARA 313**

This product is not regulated by SARA.

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contains HAPs.

### US State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals.

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight %</u>	<u>Category</u>
Streptomycin sulfate	3810-74-0	0.5 - 1.5	Developmental

#### **WHMIS Hazard Class**

D2B - Toxic materials



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## SECTION 16: Other information

**Reason for revision**                      SDS sections updated.

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**End of Safety Data Sheet**

**Revision date**            14-Jan-2016  
**Product code**            15240096

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**Product name** Antibiotic Antimycotic

## SAFETY DATA SHEET

Version 4.6  
Revision Date 03/21/2018  
Print Date 08/05/2018

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**1. PRODUCT AND COMPANY IDENTIFICATION****1.1 Product identifiers**

Product name : Heparin sodium salt, from porcine intestinal mucosa

Product Number : H3393  
Brand : Sigma-Aldrich

CAS-No. : 9041-08-1

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

Identified uses : Laboratory chemicals, Synthesis of substances

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

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052

**1.4 Emergency telephone number**

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

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**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture.

**2.2 GHS Label elements, including precautionary statements**

Not a hazardous substance or mixture.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none**

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**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

CAS-No. : 9041-08-1

**Hazardous components**

Component	Classification	Concentration
Heparin, sodium salt		-

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**4. FIRST AID MEASURES****4.1 Description of first aid measures****General advice**

Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact**

Wash off with soap and plenty of water.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

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**5. FIREFIGHTING 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**

No data available

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available

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**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

**6.2 Environmental precautions**

Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

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**7. HANDLING AND STORAGE****7.1 Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

For precautions see section 2.2.

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

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

Keep in a dry place.

Storage class (TRGS 510): 13: Non Combustible Solids

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

### Appropriate engineering controls

General industrial hygiene practice.

### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Do not let product enter drains.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- |  |                               |
|--|-------------------------------|
| a) Appearance                              | Form: powder<br>Colour: beige |
| b) Odour                                   | No data available             |
| c) Odour Threshold                         | No data available             |
| d) pH                                      | 5.0 - 7.5                     |
| e) Melting point/freezing point            | No data available             |
| f) Initial boiling point and boiling range | No data available             |
| g) Flash point                             | No data available             |
| h) Evaporation rate                        | No data available             |
| i) Flammability (solid, gas)               | No data available             |

j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
l)	Vapour density	No data available
m)	Relative density	No data available
n)	Water solubility	50 g/l
o)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

## 9.2 Other safety information

No data available

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Sulphur oxides

Other decomposition products - No data available

In the event of fire: see section 5

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Mouse - > 5,000 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**

No data available

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: MI0850000

Heparin and its salts act as anticoagulants subcutaneously or intravenously.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence

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**12. ECOLOGICAL INFORMATION****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

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**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

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## 15. REGULATORY INFORMATION

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Chronic Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

Heparin, sodium salt

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### New Jersey Right To Know Components

Heparin, sodium salt

CAS-No.  
9041-08-1

Revision Date

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. OTHER INFORMATION

### HMIS Rating

Health hazard:	0
Chronic Health Hazard:	*
Flammability:	0
Physical Hazard	0

### NFPA Rating

Health hazard:	0
Fire Hazard:	0
Reactivity Hazard:	0

### Further information

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**Preparation Information**  
Sigma-Aldrich Corporation  
Product Safety – Americas Region  
1-800-521-8956

Version: 4.6

Revision Date: 03/21/2018

Print Date: 08/05/2018