1. PRODUCT AND COMPANY IDENTIFICATION

Product: Gentamicin sulfate
Part number: 17-518, 17-519, 17-528
Chemical characterization: Aqueous solution of Gentamicin Sulfate
Supplier: Lonza Walkersville, Inc.
8830 Biggs Ford Road
Walkersville, MD 21793-0127
Emergency telephone number: 1-800-424-9300 or 1-703-527-3887 (Chemtrec)
Product use: Bacterial growth inhibitor
Canadian PIN: N/A

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS Number</th>
<th>EU Inventory Number</th>
<th>EC Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gentamicin sulfate</td>
<td>1405-41-0</td>
<td>215-778-98</td>
<td>Xn; R68/21/22 Xi; R38 R43</td>
</tr>
</tbody>
</table>

Other components

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS Number</th>
<th>EU Inventory Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
</tr>
</tbody>
</table>

See Section 15 of this MSDS for OSHA Regulatory Status
See Section 16 of this MSDS for additional component information and for explanation of R-phrases

3. HAZARDS IDENTIFICATION

Emergency overview: Pale yellow, odorless solution. Caution. May cause skin irritation or allergic skin reactions.
Will not burn. Incase of fire, use extinguishing media suitable for the material that is burning.

Primary route(s) of entry: Skin contact

Symptoms of exposure:
Inhalation: None known.
Eye contact: May cause transient stinging.
### Skin contact
May cause irritation, itching and redness. May cause allergic skin reactions. Prolonged and repeated contact with large areas of the skin may cause hearing loss.

### Ingestion
May cause irritation to gastro-intestinal tract, adverse health effects.

### Medical conditions aggravated by exposure
Kidney diseases; preexisting skin diseases.

### Listed as carcinogen or potential carcinogen
Not listed by OSHA, the International Agency for Research on Cancer.

## 4. FIRST AID

### Inhalation
Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

### Eye contact
Hold eye open and flush slowly and gently with plenty of water for several minutes. Remove any contact lenses, and continue flushing for several more minutes. Seek medical attention if irritation develops and persists.

### Skin contact
Wash affected areas with plenty of water, and soap if available, for several minutes. Remove and clean contaminated clothing and shoes. Seek medical attention if irritation develops and persists.

### Ingestion
Give 3-4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get medical attention to determine whether vomiting or evacuation of stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person.

### Note to physician
Gentamicin is an aminoglycoside which causes ototoxicity and nephrotoxicity by systemic administration.

## 5. FIRE FIGHTING MEASURES

### Flash Point and Method
N/A

### General hazard
Does not present any special hazards.

### Extinguishing media
Use media suitable for the material that is burning.

### Extinguishing media to avoid
None

### Special firefighting instructions
Move containers from area if it can be done without risk.

### Firefighting equipment
As in any fire, wear NIOSH approved, positive-pressure, self-contained breathing apparatus and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions
Wear appropriate protective equipment (see Section 8). Avoid skin and eye contact. Wash thoroughly after handling.

### Environmental precautions
None.
Clean-up methods
Absorb in vermiculite, kitty litter, sawdust. Sweep up and place in a compatible container for disposal.

7. HANDLING AND STORAGE

Handling
Wear appropriate protective equipment (see Section 8). Do not pipette by mouth. Avoid skin and eye contact. Wash thoroughly after handling.

Storage
Store at 15-30 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls
General ventilation should be adequate for laboratory uses of this product.

Personal Protection
Respirator
In operations where mists are generated, use a NIOSH approved respirator that has been selected by an industrial hygienist or other technically qualified person for the specific work conditions. If respirators are used, OSHA requires compliance with its respiratory protection program (29 CFR 1910.134).

Eye Protection
Wear safety glasses or vented safety goggles.

Gloves
Wear rubber gloves.

Clothing
Laboratory coat.

Other
Eye wash, emergency shower.

Hygiene practices
Wash thoroughly after handling, and before eating, drinking, smoking, or using the toilet.

Exposure controls
None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form
Liquid

Color
Pale yellow

Odor
None

Properties
pH: N/D
Relative density (20° C): N/D
Solidification point: 0 °C
Water solubility: Soluble

10. STABILITY AND REACTIVITY

Reactivity
Stable

Materials to avoid
Strong oxidizing agents.

Conditions to avoid
None known
11. TOXICOLOGICAL INFORMATION

Acute Toxicity
No information available for product.

For Gentamicin
Oral LD_{50} (rat): 6,600 mg/kg
Oral LD_{50} (mouse): 10,000 mg/kg

Chronic Toxicity
No information available for product.

For Gentamicin
Topical applications can cause ototoxicity or skin sensitization. Systemic administration can cause nephrotoxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity
No information available.

Persistence/degradability
No information available.

13. DISPOSAL CONSIDERATIONS

RCRA hazardous waste code
Not regulated

Special instructions
Observe all federal, state and local laws and regulations.

14. TRANSPORT INFORMATION

DOT hazard class
Not regulated

TDG hazard class
Not regulated

15. REGULATORY INFORMATION

OSHA regulatory status
Hazardous

(29 CFR 1910.1200)

CERCLA reportable quantity
Name
Reportable quantity (lbs)
None
N/A

(40 CFR 117, 302)

SARA extremely hazardous substances (40 CFR 355)
Name
Threshold planning quantity (lbs)
Reportable quantity (lbs)
None
N/A
N/A

(40 CFR 370)

SARA hazard categories
Immediate (Acute)
Delayed (Chronic)

SARA toxic chemicals (40 CFR 372)
Name
CAS Number
Percentage
None
N/A
N/A
Inventory Status

Chemicals in this product, other than water, are not listed on the US TSCA Chemical Substances Inventory or the Canadian Domestic Substances List. All are listed on the European EINECS.

Toxic Substance Control Act

This product can only be used for TSCA excluded or exempt purposes, such as FDA or R&D.

Controlled Products Regulations

This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS classification

D2B

EC label for product

Xi; R43

State regulations

N/A

16. OTHER INFORMATION

Risk phrases

R68/21/22: Harmful: Possible risk of irreversible effects in contact with skin and if swallowed.
R38: Irritating to skin
R43: May cause sensitization by skin contact.

Abbreviations

C - Ceiling limit
EINECS – European Inventory of Existing Chemical Substances
ELINCS – European List of Notified Chemical Substances
ERG – Emergency Response Guidebook
LC50 - The concentration of a substance in air that will kill 50% of test animals within a certain exposure period.
LD50 - The dose that causes death in 50% of test animals.
N/A - Not applicable
N/D - Not determined
N/E - Not established
N/K - Not known
PIN – Product Identification Number
RQ - Reportable Quantity
TPQ - Threshold Planning Quantity
WHMIS – Workplace Hazardous Materials Information System

Preparation information

Date prepared
February 7, 2007

Replaces
March 23, 2005

Revision information
Section 1: Change of company name.

MSDS number
W-02032

Disclaimer

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