

# SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



## Gentamicin / Cloxacillin Formulation

Version  
6.0

Revision Date:  
06/17/2025

SDS Number:  
1936061-00020

Date of last issue: 04/14/2025  
Date of first issue: 09/11/2017

### SECTION 1. IDENTIFICATION

Product name : Gentamicin / Cloxacillin Formulation

#### Manufacturer or supplier's details

Company name of supplier : Merck & Co., Inc  
Address : 126 E. Lincoln Avenue  
Rahway, New Jersey U.S.A. 07065  
Telephone : 908-740-4000  
Emergency telephone : 1-908-423-6000  
E-mail address : EHSDATASTEWARD@merck.com

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

Recommended use : Veterinary product  
Restrictions on use : Not applicable

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Respiratory sensitization : Category 1  
Skin sensitization : Category 1  
Reproductive toxicity : Category 1A

#### Other hazards

None known.

#### GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H360D May damage the unborn child.

Precautionary Statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P261 Avoid breathing mist or vapors.  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P280 Wear protective gloves, protective clothing, eye protection and face protection.

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P285 In case of inadequate ventilation wear respiratory protection.

### Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical attention.

P333 + P313 If skin irritation or rash occurs: Get medical attention.

P342 + P311 If experiencing respiratory symptoms: Call a doctor.

P362 + P364 Take off contaminated clothing and wash it before reuse.

### Storage:

P405 Store locked up.

### Disposal:

P501 Dispose of contents and container to an approved waste disposal plant.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

| Chemical name                                    | CAS No./Unique ID | Concentration (% w/w) | Trade secret |
|--|-------------------|-----------------------|--------------|
| Peanut oil                                       | 8002-03-7*        | >= 80 - <= 100        | TSC          |
| 1,2,3-Propanetriyl tris(12-hydroxyoctadecanoate) | 139-44-6*         | >= 1 - <= 5           | TSC          |
| cloxacillin                                      | 61-72-3*          | >= 1 - <= 5           | TSC          |
| Gentamicin                                       | 1403-66-3*        | >= 0.1 - <= 1         | TSC          |

\* Indicates that the identifier is a CAS No.

TSC- the actual concentration or concentration range is withheld as a trade secret

## SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.

When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.

If not breathing, give artificial respiration.

If breathing is difficult, give oxygen.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.

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|   |  |
|---|--|
| In case of eye contact                                      | Remove contaminated clothing and shoes.<br>Get medical attention.<br>Wash clothing before reuse.<br>Thoroughly clean shoes before reuse.   |
| If swallowed  | : Flush eyes with water as a precaution.<br>Get medical attention if irritation develops and persists.<br>If swallowed, DO NOT induce vomiting.<br>Get medical attention.<br>Rinse mouth thoroughly with water.  |
| Most important symptoms and effects, both acute and delayed | : Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).<br>May cause an allergic skin reaction.<br>May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br>May damage the unborn child. |
| Protection of first-aiders                                  | : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).  |
| Notes to physician  | : Treat symptomatically and supportively.  |

## SECTION 5. FIRE-FIGHTING MEASURES

|  |   |
|--|---|
| Suitable extinguishing media                   | : Water spray<br>Alcohol-resistant foam<br>Carbon dioxide (CO <sub>2</sub> )<br>Dry chemical  |
| Unsuitable extinguishing media                 | : None known.   |
| Specific hazards during fire fighting          | : Exposure to combustion products may be a hazard to health.  |
| Hazardous combustion products                  | : Carbon oxides<br>Chlorine compounds<br>Nitrogen oxides (NO <sub>x</sub> )<br>Sulfur compounds   |
| Specific extinguishing methods                 | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers.<br>Remove undamaged containers from fire area if it is safe to do so.<br>Evacuate area. |
| Special protective equipment for fire-fighters | : In the event of fire, wear self-contained breathing apparatus.<br>Use personal protective equipment.  |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

|   |  |
|---|--|
| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment.<br>Follow safe handling advice (see section 7) and personal |
|---|--|

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|   |   |
|---|---|
| gency procedures                                      | protective equipment recommendations (see section 8).   |
| Environmental precautions                             | : Avoid release to the environment.<br>Prevent further leakage or spillage if safe to do so.<br>Prevent spreading over a wide area (e.g., by containment or oil barriers).<br>Retain and dispose of contaminated wash water.<br>Local authorities should be advised if significant spillages cannot be contained.   |
| Methods and materials for containment and cleaning up | : Soak up with inert absorbent material.<br>For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.<br>Clean up remaining materials from spill with suitable absorbent.<br>Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.<br>Sections 13 and 15 of this SDS provide information regarding certain local or national requirements. |

## SECTION 7. HANDLING AND STORAGE

|                             |  |
|-----------------------------|--|
| Technical measures          | : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.  |
| Local/Total ventilation     | : If sufficient ventilation is unavailable, use with local exhaust ventilation.  |
| Advice on safe handling     | : Do not get on skin or clothing.<br>Do not breathe mist or vapors.<br>Do not swallow.<br>Avoid contact with eyes.<br>Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment<br>Keep container tightly closed.<br>Already sensitized individuals, and those susceptible to asthma, allergies, chronic or recurrent respiratory disease, should consult their physician regarding working with respiratory irritants or sensitizers.<br>Take care to prevent spills, waste and minimize release to the environment. |
| Conditions for safe storage | : Keep in properly labeled containers.<br>Store locked up.<br>Keep tightly closed.<br>Store in accordance with the particular national regulations.  |
| Materials to avoid          | : Do not store with the following product types:<br>Strong oxidizing agents<br>Self-reactive substances and mixtures<br>Organic peroxides  |

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Explosives  
Gases

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

| Components   | CAS-No.   | Value type<br>(Form of<br>exposure)                | Control parame-<br>ters / Permissible<br>concentration | Basis     |
|--|-----------|--|--|-----------|
| Peanut oil   | 8002-03-7 | TWA (mist -<br>total)                              | 10 mg/m <sup>3</sup>                                   | NIOSH REL |
|  |           | TWA (mist -<br>respirable)                         | 5 mg/m <sup>3</sup>                                    | NIOSH REL |
| 1,2,3-Propanetriyl tris(12-<br>hydroxyoctadecanoate) | 139-44-6  | TWA (Inhal-<br>able particu-<br>late matter)       | 10 mg/m <sup>3</sup>                                   | ACGIH     |
|  |           | TWA (Res-<br>pirable par-<br>ticulate mat-<br>ter) | 3 mg/m <sup>3</sup>                                    | ACGIH     |
| cloxacillin  | 61-72-3   | TWA  | 100 µg/m <sup>3</sup> (OEB<br>2)                       | Internal  |
|  |           | Further information: RSEN, DSEN                    |  |           |
|  |           | Wipe limit   | 100 µg/100 cm <sup>2</sup>                             | Internal  |
| Gentamicin   | 1403-66-3 | TWA  | 0.1 mg/m <sup>3</sup> (OEB<br>2)                       | Internal  |
|  |           | Further information: OTO                           |  |           |

#### Engineering measures

- : Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip-less quick connections). All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. Laboratory operations do not require special containment.

#### Personal protective equipment

##### Respiratory protection

- : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

##### Hand protection

##### Material

- : Chemical-resistant gloves

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- Eye protection : Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.
- Skin and body protection : Work uniform or laboratory coat.
- Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.  
When using do not eat, drink or smoke.  
Contaminated work clothing should not be allowed out of the workplace.  
Wash contaminated clothing before re-use.  
The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : suspension
- Color : white
- Odor : No data available
- Odor Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : No data available
- Flash point : No data available
- Evaporation rate : No data available
- Flammability (solid, gas) : Not applicable
- Flammability (liquids) : No data available
- Upper explosion limit / Upper flammability limit : No data available
- Lower explosion limit / Lower flammability limit : No data available
- Vapor pressure : No data available

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|  |   |  |
|--|---|--|
| Relative vapor density                 | : | No data available  |
| Relative density                       | : | No data available  |
| Density                                | : | No data available  |
| Solubility(ies)                        |   |  |
| Water solubility                       | : | No data available  |
| Partition coefficient: n-octanol/water | : | Not applicable   |
| Autoignition temperature               | : | No data available  |
| Decomposition temperature              | : | No data available  |
| Viscosity                              |   |  |
| Viscosity, kinematic                   | : | No data available  |
| Explosive properties                   | : | Not explosive  |
| Oxidizing properties                   | : | The substance or mixture is not classified as oxidizing. |
| Particle characteristics               |   |  |
| Particle size                          | : | Not applicable   |

## SECTION 10. STABILITY AND REACTIVITY

|                                    |   |  |
|------------------------------------|---|--|
| Reactivity                         | : | Not classified as a reactivity hazard.         |
| Chemical stability                 | : | Stable under normal conditions.                |
| Possibility of hazardous reactions | : | Can react with strong oxidizing agents.        |
| Conditions to avoid                | : | None known.                                    |
| Incompatible materials             | : | Oxidizing agents                               |
| Hazardous decomposition products   | : | No hazardous decomposition products are known. |

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Inhalation  
Skin contact  
Ingestion  
Eye contact

### Acute toxicity

Not classified based on available information.

### Product:

|                       |   |  |
|-----------------------|---|--|
| Acute dermal toxicity | : | Acute toxicity estimate: > 5,000 mg/kg<br>Method: Calculation method |
|-----------------------|---|--|

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### Components:

#### Peanut oil:

- |                       |   |   |
|-----------------------|---|---|
| Acute oral toxicity   | : | LD50 (Rat): > 2,000 mg/kg<br>Method: OECD Test Guideline 401<br>Remarks: Based on data from similar materials |
| Acute dermal toxicity | : | LD50 (Rat): > 2,000 mg/kg<br>Remarks: Based on data from similar materials                                    |

#### 1,2,3-Propanetriyl tris(12-hydroxyoctadecanoate):

- |                       |   |  |
|-----------------------|---|--|
| Acute oral toxicity   | : | LD50 (Rat): > 5,000 mg/kg<br>Remarks: Based on data from similar materials |
| Acute dermal toxicity | : | LD50 (Rat): > 2,000 mg/kg<br>Remarks: Based on data from similar materials |

#### cloxacillin:

- |   |   |   |
|---|---|---|
| Acute oral toxicity                             | : | LD50 (Rat): 5,000 mg/kg<br><br>LD50 (Mouse): 5,000 mg/kg  |
| Acute toxicity (other routes of administration) | : | LD50 (Mouse): 1,117 mg/kg<br>Application Route: Intramuscular<br><br>LD50 (Mouse): 916 mg/kg<br>Application Route: Intravenous<br><br>LD50 (Mouse): 1,500 mg/kg<br>Application Route: Subcutaneous<br><br>LD50 (Rat): 1,660 mg/kg<br>Application Route: Intravenous<br><br>LD50 (Rat): 4,200 mg/kg<br>Application Route: Subcutaneous |

#### Gentamicin:

- |   |   |  |
|---|---|--|
| Acute oral toxicity                             | : | LD50 (Rat): 8,000 - 10,000 mg/kg<br><br>LD50 (Mouse): 10,000 mg/kg   |
| Acute inhalation toxicity                       | : | LC50 (Rat): > 0.2 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Remarks: No mortality observed at this dose.         |
| Acute toxicity (other routes of administration) | : | LD50 (Rat): 67 - 96 mg/kg<br>Application Route: Intravenous<br><br>LD50 (Rat): 371 - 384 mg/kg<br>Application Route: Intramuscular |

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LDLo (Monkey): 30 mg/kg  
Application Route: Intravenous

### Skin corrosion/irritation

Not classified based on available information.

### Components:

#### Peanut oil:

|         |   |                                      |
|---------|---|--------------------------------------|
| Species | : | Rabbit                               |
| Result  | : | No skin irritation                   |
| Remarks | : | Based on data from similar materials |

#### 1,2,3-Propanetriyl tris(12-hydroxyoctadecanoate):

|         |   |                                      |
|---------|---|--------------------------------------|
| Species | : | Rabbit                               |
| Result  | : | No skin irritation                   |
| Remarks | : | Based on data from similar materials |

#### cloxacillin:

|         |   |                                     |
|---------|---|-------------------------------------|
| Remarks | : | Not classified due to lack of data. |
|---------|---|-------------------------------------|

#### Gentamicin:

|         |   |                      |
|---------|---|----------------------|
| Species | : | Rabbit               |
| Result  | : | Mild skin irritation |

### Serious eye damage/eye irritation

Not classified based on available information.

### Components:

#### Peanut oil:

|         |   |                                      |
|---------|---|--------------------------------------|
| Species | : | Rabbit                               |
| Result  | : | No eye irritation                    |
| Remarks | : | Based on data from similar materials |

#### 1,2,3-Propanetriyl tris(12-hydroxyoctadecanoate):

|         |   |                                      |
|---------|---|--------------------------------------|
| Species | : | Rabbit                               |
| Result  | : | No eye irritation                    |
| Remarks | : | Based on data from similar materials |

#### cloxacillin:

|         |   |                                     |
|---------|---|-------------------------------------|
| Remarks | : | Not classified due to lack of data. |
|---------|---|-------------------------------------|

#### Gentamicin:

|         |   |                     |
|---------|---|---------------------|
| Species | : | Rabbit              |
| Result  | : | Mild eye irritation |

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### Respiratory or skin sensitization

#### Skin sensitization

May cause an allergic skin reaction.

#### Respiratory sensitization

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

#### Components:

##### **cloxacillin:**

|                    |   |  |
|--------------------|---|--|
| Routes of exposure | : | Dermal   |
| Assessment         | : | Probability or evidence of skin sensitization in humans                    |
| Result             | : | positive   |
|                    | : |  |
| Assessment         | : | Probability of respiratory sensitization in humans based on animal testing |
| Result             | : | positive   |

##### **Gentamicin:**

|         |   |                   |
|---------|---|-------------------|
| Remarks | : | No data available |
|---------|---|-------------------|

### Germ cell mutagenicity

Not classified based on available information.

#### Components:

##### **Peanut oil:**

|                       |   |  |
|-----------------------|---|--|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative |
|                       | : |  |

##### **1,2,3-Propanetriyl tris(12-hydroxyoctadecanoate):**

|                       |   |  |
|-----------------------|---|--|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Method: OECD Test Guideline 471<br>Result: negative<br>Remarks: Based on data from similar materials |
|                       | : |  |

##### **cloxacillin:**

|                       |   |   |
|-----------------------|---|---|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative<br>Remarks: Information given is based on data obtained from similar substances. |
|                       | : |   |

##### **Genotoxicity in vivo:**

|                      |   |   |
|----------------------|---|---|
| Genotoxicity in vivo | : | Test Type: Micronucleus test<br>Species: Mouse<br>Result: negative<br>Remarks: Information given is based on data obtained from similar substances. |
|                      | : |   |

##### **Gentamicin:**

|                       |   |   |
|-----------------------|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro mammalian cell gene mutation test |
|-----------------------|---|---|

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Result: negative

Test Type: Chromosome aberration test in vitro  
Result: equivocal

### Genotoxicity in vivo

: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Mouse  
Application Route: Intravenous injection  
Result: negative

### Carcinogenicity

Not classified based on available information.

### Components:

#### **cloxacillin:**

||| Remarks : Not classified due to lack of data.

#### **Gentamicin:**

||| Carcinogenicity - Assessment : No data available

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Reproductive toxicity

May damage the unborn child.

### Components:

#### **cloxacillin:**

||| Effects on fertility : Test Type: Multi-generation study  
Species: Rat  
Application Route: Oral  
Fertility: NOAEL: 500 mg/kg body weight  
Result: No effects on fertility., No effects on reproduction parameters.

||| Effects on fetal development : Test Type: Development  
Species: Rabbit  
Application Route: Oral  
Developmental Toxicity: NOAEL: 100 mg/kg body weight  
Result: No malformations were observed.

Test Type: Development  
Species: Rabbit  
Application Route: Intramuscular

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Developmental Toxicity: NOAEL: 250 mg/kg body weight  
Result: No effects on fetal development.

### Gentamicin:

#### Effects on fertility

: Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Fertility: NOAEL: 20 mg/kg body weight  
Result: No significant adverse effects were reported

#### Effects on fetal development

: Test Type: Embryo-fetal development  
Species: Rabbit  
Developmental Toxicity: NOAEL: 3.6 mg/kg body weight  
Result: No embryo-fetal toxicity.

Test Type: Embryo-fetal development  
Species: Rat  
Application Route: Intraperitoneal  
Developmental Toxicity: LOAEL: 75 mg/kg body weight  
Result: Embryo-fetal toxicity.

Test Type: Embryo-fetal development  
Species: Mouse  
Application Route: Intraperitoneal  
Developmental Toxicity: LOAEL: 10 mg/kg body weight  
Result: Fetal mortality., No malformations were observed.

Test Type: Embryo-fetal development  
Species: Rat  
Application Route: Intraperitoneal  
Developmental Toxicity: LOAEL: 50 mg/kg body weight  
Result: Fetal mortality., No malformations were observed.

#### Reproductive toxicity - Assessment

: Positive evidence of adverse effects on development from human epidemiological studies.

### STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.

### Components:

#### Gentamicin:

#### Target Organs Assessment

: Kidney, inner ear  
: Causes damage to organs through prolonged or repeated exposure.

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### Repeated dose toxicity

#### Components:

##### **cloxacillin:**

|                   |   |              |
|-------------------|---|--------------|
| Species           | : | Rat          |
| LOAEL             | : | 7,000 mg/kg  |
| Application Route | : | Intravenous  |
| Exposure time     | : | 4 Weeks      |
| Symptoms          | : | Hypoglycemia |

##### **Gentamicin:**

|                   |   |                      |
|-------------------|---|----------------------|
| Species           | : | Dog                  |
| LOAEL             | : | 3 mg/kg              |
| Application Route | : | Intramuscular        |
| Exposure time     | : | 12 Months            |
| Target Organs     | : | Kidney               |
| Symptoms          | : | Vomiting, Salivation |

|                   |   |                   |
|-------------------|---|-------------------|
| Species           | : | Monkey            |
| LOAEL             | : | 50 mg/kg          |
| Application Route | : | Subcutaneous      |
| Exposure time     | : | 3 Weeks           |
| Target Organs     | : | Kidney, inner ear |

|                   |   |                                 |
|-------------------|---|---------------------------------|
| Species           | : | Monkey                          |
| LOAEL             | : | 6 mg/kg                         |
| Application Route | : | Intramuscular                   |
| Exposure time     | : | 3 Weeks                         |
| Target Organs     | : | Blood, Kidney, inner ear, Liver |

|                   |   |               |
|-------------------|---|---------------|
| Species           | : | Rat           |
| NOAEL             | : | 5 mg/kg       |
| LOAEL             | : | 10 mg/kg      |
| Application Route | : | Intramuscular |
| Exposure time     | : | 52 Weeks      |
| Target Organs     | : | Kidney, Blood |

|                   |   |               |
|-------------------|---|---------------|
| Species           | : | Rat           |
| NOAEL             | : | 12.5 mg/kg    |
| LOAEL             | : | 50 mg/kg      |
| Application Route | : | Intramuscular |
| Exposure time     | : | 13 Weeks      |
| Target Organs     | : | Kidney        |

### Aspiration toxicity

Not classified based on available information.

### Experience with human exposure

#### Components:

##### **cloxacillin:**

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|                    |   |   |
|--------------------|---|---|
| Inhalation         | : | Remarks: May cause sensitization of susceptible persons.  |
| Skin contact       | : | Symptoms: Dermatitis<br>Remarks: May irritate skin.   |
| Eye contact        | : | Remarks: May irritate eyes.   |
| Ingestion          | : | Symptoms: May cause, Gastrointestinal disturbance, Rash<br>Remarks: May cause sensitization of susceptible persons.       |
| <b>Gentamicin:</b> |   |   |
| Ingestion          | : | Target Organs: Kidney<br>Target Organs: inner ear<br>Symptoms: Dizziness, Vertigo, hearing loss, tinnitus, fetal deafness |

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

#### Peanut oil:

|   |   |  |
|---|---|--|
| Toxicity to fish                                    | : | LC50 (Danio rerio (zebra fish)): > 10,000 mg/l<br>Exposure time: 96 h<br>Remarks: Based on data from similar materials |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 100 mg/l<br>Exposure time: 48 h<br>Remarks: Based on data from similar materials  |

#### 1,2,3-Propanetriyl tris(12-hydroxyoctadecanoate):

|   |   |  |
|---|---|--|
| Toxicity to fish                                    | : | LC50 (Danio rerio (zebra fish)): > 100 mg/l<br>Exposure time: 96 h<br>Remarks: Based on data from similar materials  |
| Toxicity to daphnia and other aquatic invertebrates | : | EL50 (Daphnia magna (Water flea)): > 100 mg/l<br>Exposure time: 48 h<br>Test substance: Water Accommodated Fraction<br>Method: Directive 67/548/EEC, Annex V, C.2.<br>Remarks: Based on data from similar materials            |
| Toxicity to algae/aquatic plants                    | : | EL50 (Desmodesmus subspicatus (green algae)): > 100 mg/l<br>Exposure time: 72 h<br>Test substance: Water Accommodated Fraction<br>Method: Directive 67/548/EEC, Annex V, C.3.<br>Remarks: Based on data from similar materials |

#### Gentamicin:

|   |   |  |
|---|---|--|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 86 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202 |
|   |   | LC50 (Americamysis): 30 mg/l<br>Exposure time: 96 h  |

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Method: US-EPA OPPTS 850.1035

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 10 µg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 1.5 µg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

EC50 (Anabaena flos-aquae (cyanobacterium)): 4.7 µg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (Anabaena flos-aquae (cyanobacterium)): 1.6 µg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50: 288.7 mg/l  
Exposure time: 3 h  
Test Type: Respiration inhibition  
Method: OECD Test Guideline 209

### Persistence and degradability

#### Components:

##### **Gentamicin:**

Biodegradability : Result: rapidly degradable  
Biodegradation: 100 %  
Exposure time: 28 d  
Method: OECD Test Guideline 314

### Bioaccumulative potential

#### Components:

##### **cloxacillin:**

Partition coefficient: n-octanol/water : log Pow: 2.44

##### **Gentamicin:**

Partition coefficient: n-octanol/water : log Pow: < -2

### **Mobility in soil**

No data available

### **Other adverse effects**

No data available

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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

- Waste from residues : Dispose of in accordance with local regulations.  
Do not dispose of waste into sewer.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
If not otherwise specified: Dispose of as unused product.

---

### SECTION 14. TRANSPORT INFORMATION

#### International Regulations

##### UNRTDG

- UN number : UN 3082
- Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Gentamicin)
- Class : 9
- Packing group : III
- Labels : 9
- Environmentally hazardous : yes

##### IATA-DGR

- UN/ID No. : UN 3082
- Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.  
(Gentamicin)
- Class : 9
- Packing group : III
- Labels : Miscellaneous
- Packing instruction (cargo aircraft) : 964
- Packing instruction (passenger aircraft) : 964
- Environmentally hazardous : yes

##### IMDG-Code

- UN number : UN 3082
- Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Gentamicin)
- Class : 9
- Packing group : III
- Labels : 9
- EmS Code : F-A, S-F
- Marine pollutant : yes

#### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### Domestic regulation

##### 49 CFR

- UN/ID/NA number : UN 3082
- Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.

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|                |                              |                              |   |
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|----------------|------------------------------|------------------------------|---|

|                  |              |   |
|------------------|--------------|---|
|                  | (Gentamicin) |   |
| Class            | :            | 9   |
| Packing group    | :            | III   |
| Labels           | :            | CLASS 9   |
| ERG Code         | :            | 171   |
| Marine pollutant | :            | yes(Gentamicin)   |
| Remarks          | :            | Above applies only to containers over 119 gallons or 450 liters.<br>Shipment by ground under DOT is non-regulated; however it may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO. |

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Respiratory or skin sensitization  
Reproductive toxicity

**SARA 313** : 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.

### US State Regulations

#### Pennsylvania Right To Know

|  |           |
|--|-----------|
| Peanut oil                                       | 8002-03-7 |
| 1,2,3-Propanetriyl tris(12-hydroxyoctadecanoate) | 139-44-6  |

#### California Prop. 65

WARNING: This product can expose you to chemicals including Gentamicin, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### California Permissible Exposure Limits for Chemical Contaminants

|            |           |
|------------|-----------|
| Peanut oil | 8002-03-7 |
|------------|-----------|

#### The ingredients of this product are reported in the following inventories:

|      |                  |
|------|------------------|
| AICS | : not determined |
| DSL  | : not determined |

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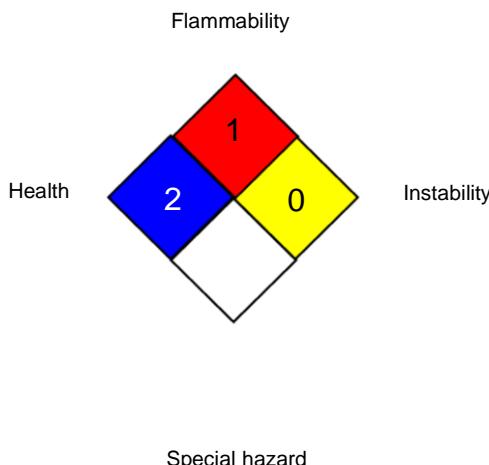
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IECSC : not determined

## SECTION 16. OTHER INFORMATION

### Further information

#### NFPA 704:



#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

### Full text of other abbreviations

|                 |   |
|-----------------|---|
| ACGIH           | : USA. ACGIH Threshold Limit Values (TLV)   |
| NIOSH REL       | : USA. NIOSH Recommended Exposure Limits  |
| ACGIH / TWA     | : 8-hour, time-weighted average   |
| NIOSH REL / TWA | : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Pre-

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vention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 06/17/2025

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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