

## 1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

### Product Identifiers

Product Name: Gentamicin Sulfate  
Product Number: G570

### Other means of identification

Synonyms: None

Recommended Use For Research/Laboratory Use ONLY

Restrictions on Use Products manufactured by PhytoTechnology Laboratories and supplied by Austratec Pty Ltd are intended for research and laboratory use ONLY. Products are NOT to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

### Details of Importer/Supplier

Company: Austratec Pty Ltd, Factory 12/49 Corporate Blvd, Bayswater VIC 3153, AUSTRALIA  
Telephone: +61 3 9729 4528  
Fax: +61 3 9729 4578  
Website: www.austratec.com.au

Emergency phone number 13 11 26 (24 hour – Poisons Information Centre)

## 2. HAZARD(S) IDENTIFICATION

GHS Classification Skin Sensitization (Category 1)  
Respiratory Sensitization (Category 1)

### GHS Label elements, including precautionary statements

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.

### Precautionary statement(s)

Prevention: P261 – Avoid breathing dust.  
P272 – Contaminated clothing should not be allowed out of the workplace.  
P280 – Wear protective gloves/protective clothing/eye protection.  
P285 – In case of inadequate ventilation, wear respiratory protection.

Response: P302 + P352 – IF ON SKIN: Wash with plenty of soap and water  
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest position comfortable for breathing.  
P333 + P313 – If skin irritation or rash occurs; Get medical advice/attention.  
P342 + P311 – If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.  
P363 – Wash contaminated clothing before reuse.

Storage: None

Disposal: P501 - Dispose of contents/container to an approved chemical waste disposal plant.

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### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

CAS Number: 1405-41-0

EC Number: 215-778-9

Formula:  $C_{21}H_{43}N_5O_7 \cdot H_2SO_4$

Molecular Weight: 575.67 g/mol

| INGREDIENT | CAS NUMBER | PERCENTAGE | HAZARDOUS                                       |
|------------|------------|------------|---|
| Gentamicin | 1405-41-0  | ~590 µg/mg | No exposure limits established by OSHA or ACGIH |

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### 4. FIRST AID MEASURES

#### Description of first aid measures

General advice: Consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

Ingestion: MAY CAUSE IRRITATION IF SWALLOWED. If swallowed, wash mouth out with water. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: MAY CAUSE IRRITATION TO RESPIRATORY TRACT. Safely remove person to fresh air. If not breathing, begin cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Seek medical attention.

Eye contact: DIRECT CONTACT MAY CAUSE IRRITATION, REDNESS, TEARING, OR BLURRED VISION. Flush eye out immediately with water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention if irritation persists.

Skin contact: MAY CAUSE IRRITATION, REDDENING, ITCHING OR INFLAMATION. Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Seek medical attention.

#### Most important symptoms and effects, both acute and delayed

See section 2 and/or section 11

#### Recommendation for immediate medical attention and special treatment needed

No data available

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### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media** Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.

#### Specific hazards arising from the chemical

Hazardous combustion products: May emit toxic fumes under fire conditions.

Toxic gases produced: Carbon dioxide and carbon monoxide, nitrogen oxides, sulfur oxides

**Special protective equipment and precaution for firefighters** In the event of fire, wear full protective clothing and NIOSH (US) or EN145 (EU) approved self contained breathing apparatus. Evacuate the area and fight fire from a safe distance.

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### 6. ACCIDENTAL RELEASE MEASURES

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Use personal protection equipment (PPE) recommended in Section 8. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation especially in confined areas. Evacuate personnel to safe areas. Avoid breathing dust. |
| <b>Environmental precautions</b>   | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.   |
| <b>Methods and materials for containment and cleanup</b>                   | Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place in a dry container and cover. Remove from area for safe disposal (see section 13).   |

## 7. HANDLING AND STORAGE

|  |  |
|--|--|
| <b>Precautions for safe handling</b>   | Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Provide appropriate exhaust ventilation where dust is formed. Wash thoroughly after use. |
| <b>Conditions for safe storage</b>     | Keep in a tightly closed container and store in a cool, dry and well ventilated area. Product is hygroscopic, protect from moisture.   |
| <b>Recommended Storage Temperature</b> | 2 to 6°C   |
| <b>Incompatibilities</b>               | Strong oxidizing agents.   |

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Exposure control measures

Australian Exposure Standards (TWA;STEL): No data available

OSHA's permissible exposure limits (PEL's): No data available

ACGIH threshold limit values (TLV's): No data available

**Engineering controls** Handle in accordance to general industrial hygiene and chemical safety practice.

### Personal protective equipment (PPE)

Eye Face Protection: Chemical safety shield, glasses or goggles approved under NIOSH (US) or EN166 (EU). Have eye washing facilities readily available where eye contact can occur.

Skin Protection: Suitable protective gloves.

Body Protection: Lab coat or protective chemical suit. Protective equipment must be selected in accordance to the amount of dangerous substance within the specific workplace.

Respiratory Protection: Use an appropriate dust mask. Use N95 (US) or type P1 (EN143) dust mask where dust level is a nuisance. Appropriate respirator approved under NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |                           |
|--|---------------------------|
| <b>Appearance</b>                          | White to off-white powder |
| <b>Odour</b>                               | Odorless                  |
| <b>Odour threshold</b>                     | No data available         |
| <b>pH</b>                                  | No data available         |
| <b>Melting point</b>                       | 218 – 237 °C              |
| <b>Initial boiling point/boiling range</b> | No data available         |
| <b>Flash point (closed cup)</b>            | No data available         |

|  |                   |
|--|-------------------|
| <b>Evaporation rate</b>                        | No data available |
| <b>Flammability (solid, gas)</b>               | No data available |
| <b>Flammable limits (upper %)</b>              | No data available |
| <b>Flammable limits (lower %)</b>              | No data available |
| <b>Vapour pressure</b>                         | No data available |
| <b>Vapour density</b>                          | No data available |
| <b>Relative density</b>                        | No data available |
| <b>Solubility</b>                              | Soluble in water  |
| <b>Partition coefficient (n-octanol/water)</b> | No data available |
| <b>Auto-ignition temperature</b>               | No data available |
| <b>Decomposition temperature</b>               | No data available |
| <b>Viscosity</b>                               | No data available |

## 10. STABILITY AND REACTIVITY

|   |   |
|---|---|
| <b>Reactivity</b>                         | No data available.  |
| <b>Chemical stability</b>                 | Stable under normal conditions of use and recommended storage conditions. |
| <b>Possibility of hazardous reactions</b> | Will not occur  |
| <b>Conditions to avoid</b>                | Moist air, dust generation  |
| <b>Incompatible materials</b>             | Strong oxidizing agents.  |
| <b>Hazardous decomposition products</b>   | Carbon dioxide and carbon monoxide, nitrogen oxides, sulfur oxides        |

## 11. TOXICOLOGICAL INFORMATION

|  |                                      |                   |
|--|--------------------------------------|-------------------|
| <b>Acute toxicity</b>                        | LD <sub>50</sub> (Oral, Rat)(mg/Kg): | >5000             |
|  | LD <sub>50</sub> (IV, Rat)(mg/Kg):   | 96                |
|  | LD <sub>50</sub> (IP, Rat)(mg/Kg):   | 630               |
| <b>Skin corrosion/irritation</b>             | No data available                    |                   |
| <b>Serious eye damage/irritation</b>         | No data available                    |                   |
| <b>Respiratory or skin sensitisation</b>     | No data available                    |                   |
| <b>Germ cell mutagenicity</b>                | No data available                    |                   |
| <b>Carcinogenicity</b>                       | NTP:                                 | No                |
|  | IARC:                                | No                |
|  | Z List:                              | No                |
|  | OSHA Reg:                            | No                |
| <b>Reproductive toxicity</b>                 | No data available.                   |                   |
| <b>Specific target organ toxicity (STOT)</b> | Single Exposure:                     | No data available |
|  | Repeated Exposure:                   | No data available |
| <b>Aspiration hazard</b>                     | No data available                    |                   |

|  |  |
|--|--|
| <b>Target organs</b>                             | Liver  |
| <b>Medical conditions aggravated by exposure</b> | Preexisting conditions   |
| <b>Routes of entry</b>                           | Ingestion, inhalation, skin and eye contact.   |
| <b>Symptoms associated with overexposure</b>     | Irritation, itching, gastrointestinal upset, nausea, vomiting, kidney impairment, muscle spasms, ear problems, blood changes, weigh changes, respiratory problems, depression, convulsions, possible mutagenic and reproductive effects. |
| <b>NIOSH/RTECS No.</b>                           | LY2625000  |

**The toxicological properties of this product have not been thoroughly investigated.**

## 12. ECOLOGICAL INFORMATION

|                                      |                   |
|--------------------------------------|-------------------|
| <b>Ecotoxicity</b>                   | No data available |
| <b>Persistence and degradability</b> | No data available |
| <b>Bioaccumulative potential</b>     | No data available |
| <b>Mobility in soil</b>              | No data available |
| <b>Other adverse effects</b>         | No data available |

## 13. DISPOSAL CONSIDERATIONS

|                                   |   |
|-----------------------------------|---|
| <b>Disposal procedure</b>         | Dispose in accordance with all applicable government, state, and environmental chemical safety practices. |
| <b>EPA hazardous waste number</b> | No data available   |

## 14. TRANSPORT INFORMATION

|                                       |  |
|---------------------------------------|--|
| <b>UN number</b>                      | ADG: Non-Dangerous Goods<br>IMDG: Non-Dangerous Goods<br>IATA: Non-Dangerous Goods |
| <b>Proper shipping/technical name</b> | Non-Dangerous Goods.   |
| <b>Hazard Class</b>                   | No data available  |
| <b>Packing group</b>                  | No data available  |
| <b>Environmental hazards</b>          | No data available  |
| <b>Special precautions</b>            | No data available  |
| <b>Hazchem</b>                        | Non-Dangerous Goods  |

## 15. REGULATORY INFORMATION

### Notification Status

Australia (AICS): Not determined

New Zealand (NZIoC): Not determined

USA (TSCA): No

SARA TITLE III: Section 302 (EHS) Ingredients: No  
 Section 313 Ingredients: No  
 Section 304 (EHS/CERCLA) Ingredients: No  
 Section 311/312 Hazard: No SARA hazards

**16. OTHER INFORMATION**

|              |               |                       |                   |                 |
|--------------|---------------|-----------------------|-------------------|-----------------|
| HMIS Rating: | Health Hazard | Chronic Health Hazard | Flammability      | Physical Hazard |
|              | 3             | *                     | 0                 | 0               |
| NFPA Rating: | Health Hazard | Fire Hazard           | Reactivity Hazard | Special Hazard  |
|              | 3             | 0                     | 0                 |                 |

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