

## Safety Data Sheet

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)  
Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

#### Product identifier

|                                        |                                                                                                                                                                                                                                                             |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product code</b>                    | 15750078                                                                                                                                                                                                                                                    |
| <b>Product name</b>                    | Gentamicin (50 mg/mL)                                                                                                                                                                                                                                       |
| <b>Unique Formula Identifier (UFI)</b> | Not Applicable                                                                                                                                                                                                                                              |
| <b>Chemical Name</b>                   | Not Applicable                                                                                                                                                                                                                                              |
| <b>REACH registration number</b>       | No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired. |

#### Relevant identified uses of the substance or mixture and uses advised against

|                                 |                                                                                                                                                                                                                      |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Relevant identified uses</b> | For research use only                                                                                                                                                                                                |
| <b>Use Description Code</b>     | SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen), PROC15 - Use as laboratory reagent, PC21 - Laboratory chemicals, SU24 - Scientific research and development |
| <b>Uses advised against</b>     | Not for consumer use.                                                                                                                                                                                                |

#### Details of the supplier of the safety data sheet

##### Manufacturer / Supplier

LIFE TECHNOLOGIES EUROPE BV  
KWARTSWEG 2  
2665 NN BLEISWIJK  
NETHERLANDS  
31-(0)180 392 400  
Email: MSDS@lifetech.com

Life Technologies Limited  
3 Fountain Drive  
Inchinnan Business Park  
Paisley  
PA4 9RF, UK  
+44 (0)141 814 6100

#### Emergency telephone number

Revision number 9  
Product code 15750078

Revision date 11-Aug-2025  
Product name Gentamicin (50 mg/mL)

**24 hour Emergency Response for Hazardous Materials** Within the USA + Canada: 1-800-424-9300 and  
**[or Dangerous Goods] Incident. Spill, Leak, Fire,** 1-703-527-3887  
**Exposure, or Accident. Call CHEMTREC** Outside the USA + Canada: 1-703-741-5970

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

CHEMTREC Ireland (Dublin) +(353)-19014670 (Greeting Language: English and Irish)  
CHEMTREC UK (London) +(44)-870-8200418 (Greeting Language: English)

**Section 2: HAZARDS IDENTIFICATION**

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

**Physical hazards**

Not Hazardous

**Health hazards**

|                        |            |
|------------------------|------------|
| Respiratory sensitiser | Category 1 |
| Skin sensitiser        | Category 1 |

**Environmental hazards**

Not Hazardous

**Additional information**

Not Applicable

**Label elements**

**Labelling according to Regulation (EC) No 1272/2008 [CLP]**

**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

**Precautionary Statements**

**Prevention**

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

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

P284 - In case of inadequate ventilation wear respiratory protection

Revision number 9  
Product code 15750078

Revision date 11-Aug-2025  
Product name Gentamicin (50 mg/mL)

P272 - Contaminated work clothing should not be allowed out of the workplace

### Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep 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

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

### Storage

Not Applicable

### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

### Other hazards

Not Applicable

## Section 3: Composition/information on ingredients

### Mixtures

We recommend handling all chemicals with caution.

| Chemical Name              | CAS No    | EINECS-No. | Weight-% | REACH registration number | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|----------------------------|-----------|------------|----------|---------------------------|-----------------------------------------------------------------|
| Gentamicin, sulfate (salt) | 1405-41-0 | 215-778-9  | 1-5      | -                         | Skin Sens.1 - H317<br>Resp. Sens. 1 - H334                      |

| Chemical Name              | Specific concentration limit (SCL) | M-Factor | Acute Toxicity Estimate |
|----------------------------|------------------------------------|----------|-------------------------|
| Gentamicin, sulfate (salt) | -                                  | -        | -                       |

## Section 4: First aid measures

### Description of first aid measures

|                           |                                                                                                                                                                                                    |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Skin contact</b>       | Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required. |
| <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>          | Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a doctor or poison control centre immediately.                                          |
| <b>Inhalation</b>         | Remove to fresh air. If not breathing, give artificial respiration. Call a doctor or poison control centre immediately.                                                                            |
| <b>Notes to Physician</b> | Treat symptomatically.                                                                                                                                                                             |

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

H317 - May cause an allergic skin reaction H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

### Indication of any immediate medical attention and special treatment needed

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. If skin irritation or rash occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Wear protective gloves/protective clothing and eye/face protection. IF exposed or concerned: Get medical advice/attention.

## Section 5: Firefighting measures

### Extinguishing media

|                                       |                                                                     |
|---------------------------------------|---------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>   | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical. |
| <b>Unsuitable extinguishing media</b> | No information available.                                           |

**Special hazards arising from the substance or mixture** Not known

|                                      |                                            |
|--------------------------------------|--------------------------------------------|
| <b>Hazardous Combustion Products</b> | No known hazardous decomposition products. |
|--------------------------------------|--------------------------------------------|

|                                |                                                              |
|--------------------------------|--------------------------------------------------------------|
| <b>Advice for firefighters</b> | Wear self-contained breathing apparatus and protective suit. |
|--------------------------------|--------------------------------------------------------------|

## Section 6: ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation  
Always wear recommended Personal Protective Equipment  
Use personal protection equipment  
Avoid contact with skin, eyes or clothing  
See section 8 for more information

### **Environmental precautions**

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

### **Methods and material for containment and cleaning up**

Soak up with inert absorbent material.

### **Reference to other sections**

See section 8 for more information.

## Section 7: Handling and storage

### **Precautions for safe handling**

Always wear recommended Personal Protective Equipment. See section 8 for more information. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use adequate ventilation and/or wear appropriate respirator.

### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

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

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers. Store in accordance with local regulations.

### **Specific end use(s)**

For research use only.

## SECTION 8: Exposure controls/personal protection

### Control parameters

| Chemical Name                           | EU OEL (TWA) | EU OEL (STEL) | EU Skin Notation |
|-----------------------------------------|--------------|---------------|------------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None         | None          | None             |

| Chemical Name                           | Austria | Belgium (TWA) | Czech Republic |
|-----------------------------------------|---------|---------------|----------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None    | None          | None           |

| Chemical Name                           | Denmark (TWA) | Finland OEL (TWA) | France OEL (VME) |
|-----------------------------------------|---------------|-------------------|------------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None          | None              | None             |

| Chemical Name                           | Croatia | Latvia | Romania |
|-----------------------------------------|---------|--------|---------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None    | None   | None    |

| Chemical Name                           | Germany OEL (TWA) | Ireland (TWA) | Italy OEL (TWA) |
|-----------------------------------------|-------------------|---------------|-----------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None              | None          | None            |

| Chemical Name                           | Lithuania OEL (TWA) | Netherlands OEL (MAC) | Norway |
|-----------------------------------------|---------------------|-----------------------|--------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None                | None                  | None   |

| Chemical Name                           | Poland | Portugal | Spain OEL (TWA) |
|-----------------------------------------|--------|----------|-----------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None   | None     | None            |

| Chemical Name                           | Sweden - Occupational Exposure Limits - TLVs (LLVs) | Switzerland | United Kingdom |
|-----------------------------------------|-----------------------------------------------------|-------------|----------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None                                                | None        | None           |

### Derived No Effect Level (DNEL)

See table for values

| Component                                       | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|-------------------------------------------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 ( 1-5 ) | None                         | None                            | None                           | None                              |

| Component                                       | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|-------------------------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 ( 1-5 ) | None                             | None                                | None                               | None                                  |

### Predicted No Effect Concentration (PNEC)

See table for values

| Chemical Name                           | Fresh water sediment | Fresh water | Water Intermittent | Microorganisms in sewage treatment | Soil (Agriculture) |
|-----------------------------------------|----------------------|-------------|--------------------|------------------------------------|--------------------|
| Gentamicin, sulfate (salt)<br>1405-41-0 | None                 | None        | None               | None                               | None               |

| Component | Marine water | Marine water | Marine water | Food chain | Air |
|-----------|--------------|--------------|--------------|------------|-----|
|-----------|--------------|--------------|--------------|------------|-----|

Revision number 9  
Product code 15750078

Revision date 11-Aug-2025  
Product name Gentamicin (50 mg/mL)

|                                                 |      | <b>sediment</b> | <b>Intermittent</b> |      |      |
|-------------------------------------------------|------|-----------------|---------------------|------|------|
| Gentamicin, sulfate (salt)<br>1405-41-0 ( 1-5 ) | None | None            | None                | None | None |

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

#### **Exposure controls**

##### **Personal protection equipment**

**Respiratory protection**      In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

**Hand protection**      Wear suitable gloves

**Eye protection**      Tight sealing safety goggles.

**Skin and Body Protection**      Wear laboratory coat for body protection.

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

##### **Environmental exposure controls**

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

|                                           |            |            |
|-------------------------------------------|------------|------------|
| Physical state                            | liquid     |            |
| Colour                                    | No data    |            |
| Odour                                     | No data    |            |
| Molecular Weight                          | No data    |            |
| Melting point / melting range             | °C No data | °F No data |
| Boiling point / boiling range             | °C No data | °F No data |
| Flammability (solid, gas)                 | No data    |            |
| Lower explosion limit                     | No data    |            |
| Upper explosion limit                     | No data    |            |
| Flash point                               | °C No data | °F No data |
| Autoignition Temperature                  | °C No data | °F No data |
| Decomposition temperature                 | °C No data | °F No data |
| Evaporation rate                          | No data    |            |
| Viscosity                                 | No data    |            |
| Solubility                                | No data    |            |
| Partition coefficient:<br>n-octanol/water | No data    |            |
| Vapour Pressure                           | No data    |            |
| Specific gravity                          | No data    |            |
| Relative density                          | No data    |            |
| Vapour density                            | No data    |            |
| Explosive properties                      | No data    |            |
| Oxidising properties                      | No data    |            |
| Particle characteristics                  | No data    |            |

### Other information

#### Information with regards to physical hazard classes

No information available

#### Other safety characteristics

No information available

## Section 10: Stability and reactivity

|                                    |                                                             |
|------------------------------------|-------------------------------------------------------------|
| Reactivity                         | None known.                                                 |
| Chemical stability                 | Stable under normal conditions.                             |
| Possibility of hazardous reactions | Hazardous reaction has not been reported.                   |
| Conditions to avoid                | No information available.                                   |
| Incompatible materials             | No dangerous reaction known under conditions of normal use. |
| Hazardous decomposition products   | No known hazardous decomposition products.                  |

## Section 11: Toxicological information

### Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Product Information** No acute toxicity information is available for this product

#### Acute Toxicity

| Chemical Name              | Oral LD50      | Dermal LD50       | Inhalation LC50   |
|----------------------------|----------------|-------------------|-------------------|
| Gentamicin, sulfate (salt) | > 5 g/kg (Rat) | No data available | No data available |

#### Principal Routes of Exposure

**Skin corrosion/irritation** Data are conclusive but insufficient for classification

**Serious eye damage/irritation** Data are conclusive but insufficient for classification

**Respiratory or skin sensitisation** May cause sensitisation by inhalation and skin contact

**Specific target organ toxicity (STOT) – single exposure** Data are conclusive but insufficient for classification

**Specific target organ toxicity (STOT) – repeated exposure** Data are conclusive but insufficient for classification

**Carcinogenicity** Data are conclusive but insufficient for classification

**Germ cell mutagenicity** Data are conclusive but insufficient for classification

**Reproductive Toxicity** Data are conclusive but insufficient for classification

**Aspiration Hazard** Data are conclusive but insufficient for classification

#### Information on other hazards

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

## Section 12: Ecological information

### Toxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name              | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish  | Microtox Data     | log Pow           |
|----------------------------|-------------------|-----------------------------------------------------|-------------------|-------------------|-------------------|
| Gentamicin, sulfate (salt) | No data available | No data available                                   | No data available | No data available | No data available |

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

**Mobility in soil** No information available.

**Results of PBT and vPvB assessment** No information available.

### Endocrine disrupting properties

This product does not contain any known or suspected endocrine disruptors

### Other adverse effects

**Persistent Organic Pollutant** This product does not contain any known or suspected substance

**Ozone depletion potential (ODP)** This product does not contain any known or suspected substance

## Section 13: Disposal considerations

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## Section 14: Transport information

### IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations

|                                   |                |
|-----------------------------------|----------------|
| <b>UN number or ID number</b>     | Not Applicable |
| <b>UN proper shipping name</b>    | Not Applicable |
| <b>Transport hazard class(es)</b> | Not Applicable |
| <b>Packing group</b>              | Not Applicable |

Revision number 9  
Product code 15750078

Revision date 11-Aug-2025  
Product name Gentamicin (50 mg/mL)

**Environmental hazards**

Not Applicable

**Special precautions for user**

Not Applicable

**Maritime transport in bulk according to IMO instruments**

Not Applicable.

**Section 15: Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****Substances of Very High Concern**

None

**Substance subject to authorisation per REACH Annex XIV**

None

**Restricted substances under EC 1907/2006, Annex XVII**

None

**Regulation (EC) No 649/2012 (Rotterdam Convention - export/import of dangerous chemicals)**

None

**Regulation (EU) No 2019/1021 (Stockholm Convention – persistent organic pollutants)**

None

**EU - Substances Depleting the Ozone layer (1005/2009)**

None

**German Water hazard classes (Wassergefährdungsklassen)**

Not classified.

**Other International Inventories**

| Chemical Name              | EINECS (European Union) | ELINCS (European List of Notified Chemical Substances) | ENCS (Japan) | PICCS (Philippines) |
|----------------------------|-------------------------|--------------------------------------------------------|--------------|---------------------|
| Gentamicin, sulfate (salt) | Listed                  | -                                                      | Listed       | Listed              |

| Chemical Name | AICS (Australia) | South Korea | Canada (DSL) | NDSL |
|---------------|------------------|-------------|--------------|------|
|---------------|------------------|-------------|--------------|------|

Revision number 9  
Product code 15750078

Revision date 11-Aug-2025  
Product name Gentamicin (50 mg/mL)

|                            |   | (KECL) |   |   |
|----------------------------|---|--------|---|---|
| Gentamicin, sulfate (salt) | - | Listed | - | - |

### Chemical safety assessment

No Chemical safety assessment has been carried out.

|                            |                                                           |
|----------------------------|-----------------------------------------------------------|
| <b>Reason for revision</b> | Update according to Commission Regulation EU No. 2020/878 |
| <b>Revision number</b>     | 9                                                         |
| <b>Revision date</b>       | 11-Aug-2025                                               |

**References**

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

|                        |            |                    |
|------------------------|------------|--------------------|
| Respiratory sensitiser | Category 1 | Calculation method |
| Skin sensitiser        | Category 1 | Calculation method |

**Abbreviations and acronyms**

**TWA** - Time-Weighted Average  
**OELs** - Occupational Exposure Limits  
**STEL** - Short Term Exposure Limit  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**CEPA** - Canadian Environmental Protection Act  
**EPA** - Environmental Protection Agency  
**OSHA** - Occupational Safety and Health Administration of the US Department of Labour  
**IATA** - International Air Transport Association  
**DOT** - Department of Transportation  
**IMDG** - International Maritime Dangerous Goods  
**ACGIH** - American Conference of Governmental Industrial Hygienists  
**NIOSH** - National Institute for Occupational Safety and Health  
**AIHA** - American Industrial Hygiene Association  
**HMIS** - Department of Defense Hazardous Materials Information System  
**NTP** - National Toxicology Program  
**IARC** - International Agency for Research on Cancer

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006.

"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 WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

**Revision number** 9  
**Product code** 15750078

**Revision date** 11-Aug-2025  
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**End of Safety Data Sheet**

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