

Material safety data sheet

according to 1907/2006/EG, Article 31



GENAXXON

b i o s c i e n c e

Product number : M3121

Product name :

Gentamycin sulfate

1. Identification of the substance/preparation and of the company

Product identifier

Product Name: Gentamycin sulfate

Catalogue Number: M3121

CAS Number: 1405-41-0

EC Number: 215-778-9

REACH-No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline

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

No further relevant information available.

Application of the substance/the preparation

Laboratory chemical

Chemical analytics

Antibiotic for research usage

Details of the supplier of the safety data sheet

Manufacturer /Supplier:

Genaxxon bioscience GmbH, Söflinger Str. 70, 89077 Ulm/Germany.

Tel.: +49 (0)731 3608 123, info@genaxxon.com

Further information available from: General Management

Emergency telephone number:

Poison Information Centre Mainz, Germany, Tel.: +49 (0)6131 19240 / 24 h

NOTE: If this product is a kit or supplied with more than one material, please refer to the MSDS for each component for hazard information.

Product Use:

This products are for laboratory research use only and are not intended for human or animal diagnostics, therapeutics or other clinical uses.

2. Hazardous identification

Classification of the substance/preparation/mixture

Classification according to Regulation (EC) No 1272/2008

Skin Sens. 1 H317 May cause an allergic skin reaction

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

Pictogram(s)



GHS08

Signal word Danger

Hazard determining components of labelling:

Gentymycin sulfate

Hazard statement(s)

H317 May cause an allergic skin reaction

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Other hazards

Result of PBT and vPvB assessment

PBT: not applicable

vPvB: not applicable

3. Composition/information on ingredients

Chemical Characterisation: Substance

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Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
CAS-No.: 1405-41-0	Gentamycin sulfate	Resp. Sens. 1; Skin Sens. 1;	<=100%
EINECS: 215-778-9		H317, H334	

Additional information: For the wording of the listed risk phrases refer to section 16.

4. First-aid measures

Description of first aid measures

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.
Call a doctor immediately

After eye contact:

Rinse opened eye with plenty of water for several minutes under running water. Then consult a doctor.

After swallowing:

Rinse out mouth.
Do not induce vomiting; call for medical help immediately.

Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

Water Spray. Carbon Dioxide. Dry chemical powder, or appropriate foam. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture:

Formation of toxic gases is possible during heating or in case of fire.

In case of a fire, the following can be released:

Carbon oxides (CO, CO₂)

Nitrogen oxides (NO_x)

Sulfur oxides (SO_x)

Advice for fire fighters:

Protective equipment:

Mouth respiratory protective device.
Wear self-contained respiratory protective device.

Additional information:

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Contain escaping vapours with water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Do not inhale dust.

Avoid substance contact.

Ensure adequate ventilation.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions: Do not allow product to enter sewage system, surface or ground water.

Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up:

Pick up mechanically. Keep suitable, closed containers for disposal.

Avoid generation of dust.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Clean up affected area.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

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Precautions for safe handling:

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Avoid contact with skin and eyes.

Prevent formation of dust.

Any unavoidable deposit of dust must be regularly removed.

Information about fire – and explosion protection: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special measures required.

Information about storage in one common storage facility: Away from sources of ignition and heat.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Recommended storage temperature: +2°C - +8°C

Storage class: 10-13

Specific end use(s): No further relevant information available.

8. Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

Store protective clothing separately.

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

Immediately remove all soiled and contaminated clothing.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter P3 (EN 143).



Protection of hands:



Protective gloves (EN 374)

The glove material has to be impermeable and resist ant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for permeation: Level: >480 min.

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

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Value for the permeation: Level \geq 480 min.

Eye/face protection: Safety glasses



Safety glasses (EN 166)

Body protection:

Use protective suit.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9. Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance

Form: Powder
Colour: White
Odour: Characteristic

pH value at 20°C: 3.5 – 5.5

Change in conditions

Melting point/Melting range: Undetermined
Boiling point/Boiling range: Undetermined

Flash point: Not applicable

Flammability (solid, gaseous): Product is not flammable

Decomposition temperature: Not determined

Self-ignition: Product is not self-igniting

Danger of explosion: Product does not present an explosion hazard

Explosion limits:

Lower: Not determined
Upper: Not determined

Vapour pressure: Not applicable

Density (20°C): Not determined

Bulk density at 20°C: Not determined

Solubility in / Miscibility with (water, 20°C): Soluble

Partition coefficient (n-octanol/water): Not determined

Viscosity:

Dynamic: Not applicable
Kinematic: Not applicable

Solvent content:

Organic solvents: 0.0%
VOC (EC) 0.00%

Other information: No further relevant information available.

10. Stability and reactivity

Reactivity: No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: In the event of fire: See chapter 5 of this data sheet.

11. Toxicological information

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Information on toxicological effects

Acute toxicity:

LD50/LC50 values relevant for classification

Components	Type	Value	Species
1405-41-0 Gentamycin sulfate			
Oral	LD50	>500mg/kg	rat

Primary irritant effect

skin corrosion/irritation: No further relevant data available.

Serious eye damage/irritation: No further relevant data available.

After inhalation: No further relevant data available.

Respiratory or skin sensitization:

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

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Additional toxicological information: -

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

The product should be treated with usual precautions while handling chemicals.

12. Ecological Information

Toxicity

Aquatic toxicity: Quantitative data on the ecological effect of the product are not available.

Persistence and degradability: No further relevant information available

Behaviour in environmental systems

Bioaccumulative potential: No further relevant information available

Mobility in soil: No further relevant information available

Additional ecological information

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available.

13. Disposal considerations

Waste treatment methods

Recommendation:

Chemicals must be disposed of in compliance with the respective national regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system. Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleaning agents: Water, if necessary together with cleansing agents.

14. Transport information

UN-Number

ADR, ADN, IMDG, IATA

Void

UN proper shipping name

ADR; ADN, IMDG, IATA:

Void

Transport hazard class(es):

ADR, ADN, IMDG, IATA class:

Void

Packing group:

ADR, IMDG, IATA

Void

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Environmental hazards / Marine pollutant:	No
Special precautions for user:	Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC-Code	Not applicable
Transport/Additional information:	Not dangerous according to the above specifications
UN „Model Regulation“:	Void

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 2012/18/EU

Named dangerous substances - ANNEX I: Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Genaxxon bioscience GmbH, shall not be held liable for any damage resulting from handling or from contact with the above product.

Disclaimer

This product is for R&D use only. Not for drug, household or other uses.

Abbreviations and Acronyms:

ACAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS: Chemical Abstracts Service (division of the American Chemical Society)

EINECS: European Inventory of Existing Commercial Chemical Substances

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

GHS: Globally Harmonized System of Classification and labeling of Chemicals

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

IMDG: International Maritime code for Dangerous Goods

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)