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

Product identifier

Product Name: **Streptomycin sulfate powder, research grade**

Catalogue Number: M3146
CAS Number: 3810-84-0
EC Number: 223-286-0
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

Repr. 2 H361 Suspected of damaging fertility or the unborn child
Acute Tox. 4 H302 Harmful if swallowed.

Classification according to European Directive 67/548/EEC or Directive 1999/45/EC.

Xn; Harmful
R22-63: Harmful if swallowed. Possible risk of harm to the unborn child
Information concerning particular hazards for human and environment: Not applicable

Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labeled according to the CLP regulation.
Hazard pictograms

GHS08 **GHS07**

Signal word: **Warning**

Hazard statements
H302 Harmful if swallowed
H361 Suspected of damaging fertility or the unborn child

Precautionary statements
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P201 Obtain special instructions before use.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.

Other hazards
Result of PBT and vPvB assessment
PBT: not applicable
vPvB: not applicable

3. Composition/information on ingredients

Chemical characterisation: Substances

Contd. on page 2

Contd. of page 1

CAS-No.: Description
3810-74-0 streptomycin sulfate
Identification number(s)
EC-number: 223-286-0

4. First-aid measures

Description of first aid measures
General information:
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Involve doctor immediately.
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:
Call a doctor immediately.
Seek medical treatment.
Immediately wash with water and soap and rinse thoroughly.
After swallowing:
Seek medical treatment.
Call for a doctor immediately.
Rinse out mouth. Make victim drink water (maximum of 2 drinking glasses).
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 (NOx),
Sulphur oxides (SOx)
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.
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.

Additional information: None

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7. Handling and storage

Handling
Precautions for safe handling:
Open and handle receptacle with care.
Prevent formation of dust.
Any unavoidable deposit of dust must be regularly removed.
Information about fire – and explosion protection:
Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Keep receptacles tightly sealed.
Store only in the original receptacle.
Information about storage in one common storage facility: No special measures required.
Further information about storage conditions:
Store under lock and key and with access restricted to technical experts or their assistants only.
Keep container sealed.
Recommended storage temperature: 15 – 25°C
Storage class: 6.1 C
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:
Required when dusts are generated.
Filter P3 (EN 149).

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
Value for the permeation: Level ≥480 min.

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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:	Odourless
pH value at 20°C:	4.5 – 7.0 (5%, H2O)
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
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: strong oxidants.
Hazardous decomposition products: In the event of fire: See chapter 5 of this data sheet.

11. Toxicological information

Information on toxicological effects
Acute toxicity:

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LD50/LC50 values relevant for classification		
3810-74-0 streptomycin sulfate		
Oral	**LD50**	430mg/kg (rat)

Primary irritant effect
on the skin: No further relevant data available.
on the eye: No further relevant data available.
After inhalation: No further relevant information available.
Sensitization: No sensitizing effect known.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Repr. 2
Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
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: No further relevant information 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,	Void
IMDG, IATA	Void
Transport hazard class(es)	
ADR, IMDG, IATA	
Class	Void
Packaging group	
ADR, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
Transport/Additional information:	Not dangerous according to the above specifications.

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UN "Model Regulation": Void

15. Regulatory information

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.

Relevant phrases
H302 Harmful if swallowed
H361 Suspected of damaging fertility or the unborn child

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P201 Obtain special instructions before use.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.

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

Abbreviations and Acronymes:
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)