

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.12.2011

Version number 1

Revision: 17.03.2010

1 Identification of the substance/mixture and of the company/undertaking

· 1.1. Product identifier

· Trade name: Gentamycin Solution

· Article number: 47991

· 1.2. Relevant identified uses of the substance or mixture and uses advised against

· Application of the substance / the preparation Laboratory chemicals

· 1.3. Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

SERVA Electrophoresis GmbH

Carl-Benz-Str. 7

D-69115 Heidelberg

Tel.: +49 6221 13840-0

FAX: +49 6221 13840-10

msds.info@serva.de

· Information department: Product Safety department Tel.: +49 6221 13840-35

· 1.4. Emergency telephone number: +49 6131 19240 (university hospital Mainz)

SERVA

Electrophoresis

2 Hazards identification

· 2.1. Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS08

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

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



Xn; Harmful

R63: Possible risk of harm to the unborn child.



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

· 2.2. Label elements

· Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms GHS08

· Signal word Danger

· Hazard-determining components of labelling:

Gentamicin sulfate

· Hazard statements

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

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*H317 May cause an allergic skin reaction.**H361 Suspected of damaging fertility or the unborn child.***Precautionary statements***P201 Obtain special instructions before use.**P281 Use personal protective equipment as required.**P285 In case of inadequate ventilation wear respiratory protection.**P302+P352 IF ON SKIN: Wash with plenty of soap and water.**P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.**P333+P313 If skin irritation or rash occurs: Get medical advice/attention.***2.3. Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**3 Composition/information on ingredients****3.2. Chemical characterization: Mixtures****Description:** Mixture of the substances listed below with harmless additions.**Dangerous components:**

CAS: 1405-41-0	Gentamicin sulfate	5-15%
EINECS: 215-778-9	☒ Xn R63; ☒ Xn R42/43	
	☒ Resp. Sens. 1, H334; Repr. 2, H361; ☒ Skin Sens. 1, H317	

Additional information For the wording of the listed risk phrases refer to section 16.**4 First aid measures****4.1. Description of first aid measures****After inhalation** Supply fresh air and to be sure call for a doctor.**After skin contact** Immediately rinse with water.**After eye contact** Rinse opened eye for several minutes under running water.**After swallowing**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

Information for doctor**4.2. Most important symptoms and effects, both acute and delayed**

No further relevant information available.

4.3. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures**5.1. Extinguishing media****Suitable extinguishing agents** Use fire fighting measures that suit the environment.**5.2. Special hazards arising from the substance or mixture** No further relevant information available.**5.3. Advice for firefighters****Protective equipment:** Mount respiratory protective device.**6 Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures** Wear protective clothing.**6.2. Environmental precautions:** Do not allow to enter sewers/ surface or ground water.**6.3. Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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Dispose contaminated material as waste according to item 13.

· **6.4. Reference to other sections**

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Handling**

· **7.1. Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

· **Information about protection against explosions and fires:** No special measures required.

· **7.2. Conditions for safe storage, including any incompatibilities**

· **Storage**

· **Requirements to be met by storerooms and receptacles:** Store at -15 to -25 °C

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **7.3. Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **8.1. Control parameters**

· **Components 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 that were valid during the creation were used as basis.

· **8.2. Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· **Breathing equipment:**

Short term filter device:

Filter P2.

· **Protection of hands:**

Protective gloves.

The glove material has to be impermeable and resistant 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 of a maximum of 15 minutes gloves made of the following materials are suitable:**

Natural rubber, NR

Nitrile rubber, NBR

· **Eye protection:** Tightly sealed goggles.

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· **Body protection:** *Protective work clothing.*

9 Physical and chemical properties

· 9.1. Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	<i>Solution</i>
· Colour:	<i>Light yellow</i>
· Odour:	<i>Characteristic</i>

· pH-value at 20°C:	<i>4 - 6</i>
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· Change in condition

· Melting point/Melting range:	<i>undetermined</i>
· Boiling point/Boiling range:	<i>> 100°C</i>

· Flash point:	<i>Not applicable</i>
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· Self igniting:	<i>Product is not selfigniting.</i>
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· Danger of explosion:	<i>Product does not present an explosion hazard.</i>
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· Density:	<i>Not determined</i>
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· Solubility in / Miscibility with

· Water:	<i>Fully miscible</i>
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· Solvent content:

· Organic solvents:	<i>0.0 %</i>
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· Solids content:	<i>8.0 %</i>
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· 9.2. Other information	<i>No further relevant information available.</i>
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10 Stability and reactivity

· 10.1. Reactivity

· 10.2. Chemical stability

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

· **10.3. Possibility of hazardous reactions** *No dangerous reactions known*

· **10.4. Conditions to avoid** *No further relevant information available.*

· **10.5. Incompatible materials:** *No further relevant information available.*

· **10.6. Hazardous decomposition products:** *No dangerous decomposition products known*

11 Toxicological information

· 11.1. Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

1405-41-0 Gentamicin sulfate

Oral	LD50	> 5000 mg/kg (rat)
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· Primary irritant effect:

· **on the skin:** *No irritant effect.*

· **on the eye:** *No irritating effect.*

· Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

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· 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:

Harmful
Irritant

12 Ecological information**· 12.1. Toxicity**

· **Acquatic toxicity:** No further relevant information available.

· **12.2. Persistence and degradability** No further relevant information available.

· Behaviour in environmental systems:

· **12.3. Bioaccumulative potential** No further relevant information available.

· **12.4. 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 undiluted product or large quantities of it to reach ground water, water course or sewage system.

· 12.5. Results of PBT and vPvB assessment

· **PBT:** PBT - assessment not available.

· **vPvB:** vPvB - assessment not available.

· **12.6. Other adverse effects** No further relevant information available.

13 Disposal considerations**· 13.1. Waste treatment methods****· Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information**· 14.1. UN-Number**

· **ADR, ADN, IMDG, IATA** Void

· 14.2. UN proper shipping name

· **ADR, ADN, IMDG, IATA** Void

· 14.3. Transport hazard class(es)

· **ADR, ADN, IMDG, IATA**

· **Class** Void

· 14.4. Packing group

· **ADR, IMDG, IATA** Void

· 14.5. Environmental hazards:

· **Marine pollutant:** No

· 14.6. Special precautions for user

Not applicable.

· 14.7. 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": -

15 Regulatory information

- **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2. Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H317 May cause an allergic skin reaction.

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

H361 Suspected of damaging fertility or the unborn child.

R42/43 May cause sensitisation by inhalation and skin contact.

R63 Possible risk of harm to the unborn child.

- **Department issuing MSDS:** Product safety department

- **Contact:** +49 6221 13840-35

- **Abbreviations and acronyms:**

PBT: persistent, bioaccumulative, toxic substance (REACH)

vPvB: very persistent, very bioaccumulative substance (REACH)

REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Regulation on classification, labelling and packaging of substances and mixtures

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

- *** Data compared to the previous version altered.**