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

1.1 Product identifier

- Trade name: Polymyxin B sulfate
- Article number: 47976
- CAS Number: 1405-20-5
- EC number: 215-774-7

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

No further relevant information available.

Application of the substance / the mixture 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:

Medical Emergency Information in case of poisoning:
Poison Information Center Mainz - Phone: +49 (0) 6131 19240
(advisory service in German or English language)

*SECTION 2: Hazards identification*

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008
  The substance is classified and labelled according to the CLP regulation.
- Hazard pictograms GHS07
- Signal word Warning
- Hazard statements
  H302 Harmful if swallowed.
- Precautionary statements
  P264 Wash thoroughly after handling.
  P270 Do not eat, drink or smoke when using this product.
  P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  P330 Rinse mouth.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

(Contd. on page 2)
SECTION 3: Composition/information on ingredients

- 3.1 Chemical characterisation: Substances
  - CAS No. Description:
    1405-20-5 Polymyxin B sulfate
  - Identification number(s):
    - EC number: 215-774-7

SECTION 4: First aid measures

- 4.1 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.
  - After inhalation Supply fresh air; consult doctor in case of complaints.
  - 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. Seek medical treatment.

- 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.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents
    CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- 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.

SECTION 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:
  Pick up mechanically.
  Dispose contaminated material as waste according to item 13.

- 6.4 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.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  Prevent formation of dust.

- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage
    Requirements to be met by storerooms and receptacles: Store at +2 to +8 °C
    Information about storage in one common storage facility: Not required.

(Contd. of page 1)
Further information about storage conditions:
Keep receptacle tightly sealed.
This product is hygroscopic.
Protect from exposure to the light.

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

SECTION 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: Not required.
- 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.
Wash hands before breaks and at the end of work.
- Breathing equipment:
  Short term filter device:
  Filter P2.
- Protection of hands:
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.
- Penetration time of glove material
The exact break trough 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: Safety glasses
- Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:
  Form: Powder
  Colour: White
  Odour: Recognisable
- pH-value (20 g/l) at 20 °C: 5.0 - 7.0
- Change in condition
  Melting point/freezing point: undetermined
  Initial boiling point and boiling range: undetermined
- Flash point: Not applicable

(Contd. on page 4)
Trade name: Polymyxin B sulfate

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
  Reacts with oxidizing agents
  As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
  Carbon monoxide and carbon dioxide
  Nitrogen oxides (NOx)
  Sulphur oxides (SOx)

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
  Harmful if swallowed.
- **LD/LC50 values that are relevant for classification:**
  Oral **LD50** 790 mg/kg (Maus)
- **Primary irritant effect:**
  - Skin corrosion/irritation Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
  - 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.

### SECTION 12: Ecological information

- **12.1 Toxicity**
  Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
Trade name: Polymyxin B sulfate

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.

SECTION 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.

SECTION 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 Marpol and the IBC Code
Not applicable.

Transport/Additional information:
Not dangerous according to the above specifications.

UN "Model Regulation": Void

SECTION 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.
SECTION 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.

- **Department issuing SDS:** Product safety department
- **Contact:** +49 6221 13840-35
- **Abbreviations and acronyms:**
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - ICAO: International Civil Aviation Organisation
  - 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)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - Acute Tox. 4: Acute toxicity – Category 4
- * Data compared to the previous version altered.