

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 01.12.2011

Version number 1

Revision: 16.04.2009

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

### 1.1. Product identifier

- Trade name: Tetracycline-HCl
- Synonyma Anchromycin-HCl

**SERVA**  
Electrophoresis

- Article number: 35866
- CAS Number:  
64-75-5
- EC number:  
200-593-8

### 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)

## 2 Hazards identification

### 2.1. Classification of the substance or mixture

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



GHS08

Repr. 2 H361d+H362 Suspected of damaging the unborn child. May cause harm to breast-fed children.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

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



Xn; Harmful

R63: Possible risk of harm to the unborn child.



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

R33-64: Danger of cumulative effects. May cause harm to breastfed babies.

- 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 substance is classified and labelled according to the CLP regulation.

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- **Hazard pictograms** GHS07, GHS08
- **Signal word** Warning
- **Hazard statements**
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H361d+H362 Suspected of damaging the unborn child. May cause harm to breast-fed children.
  - H335 May cause respiratory irritation.
  - H373 May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
  - P201 Obtain special instructions before use.
  - P281 Use personal protective equipment as required.
  - P263 Avoid contact during pregnancy/while nursing.
  - P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- **2.3. Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **3.1. Chemical characterization: Substances**
- **CAS No. Description:**  
64-75-5 tetracycline hydrochloride
- **Identification number(s):**
- **EC number:** 200-593-8
- **Description:**
- **Empirical formula:**  $C_{22}H_{24}N_2O_8 \cdot HCl$
- **MW:** 480,9

### 4 First aid measures

- **4.1. Description of first aid measures**
- **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. If symptoms persist, consult doctor.
- **After swallowing** Drink copious amounts of water and provide fresh air. Call for doctor immediately.
- **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**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **5.2. Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Nitrogen oxides (NO<sub>x</sub>)

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*Hydrogen chloride (HCl)**Carbon monoxide (CO)***· 5.3. Advice for firefighters****· Protective equipment:** *Wear self-contained 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:**  
*Dispose contaminated material as waste according to item 13.*  
*Ensure adequate ventilation.*
- **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**  
*Open and handle receptacle with care.*  
*Prevent formation of dust.*
- **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:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:**  
*This product is hygroscopic.*  
*Store in dry conditions.*  
*Protect from heat and direct sunlight.*
- **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:** *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.*  
*Immediately remove all soiled and contaminated clothing*  
*Wash hands before breaks and at the end of work.*  
*Store protective clothing separately.*  
*Avoid contact with the eyes and skin.*
- **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.*

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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 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:**

Nitrile rubber, NBR

Natural rubber, NR

- **Eye protection:** Safety glasses

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

## 9 Physical and chemical properties

- **9.1. Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Crystalline powder

**Colour:** Yellow

· **Odour:** Odourless

· **pH-value (10 g/l) at 20°C:** 2.3

- **Change in condition**

**Melting point/Melting range:** undetermined

**Boiling point/Boiling range:** undetermined

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Product is not flammable.

- **Ignition temperature:**

**Decomposition temperature:** > 215°C

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 0.72 g/cm<sup>3</sup>

- **Solubility in / Miscibility with**

**Water:** Soluble

· **9.2. Other information** No further relevant information available.

## 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

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### 11 Toxicological information

· **11.1. Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	6443 mg/kg (rat)
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· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Repr. 2

### 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

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|--|--|
| · <b>14.6. Special precautions for user</b>  | Not applicable.                                      |
| · <b>14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>   | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | -  |

### 15 Regulatory information

- **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Information about limitation of use:**  
Employment restrictions concerning pregnant and lactating women must be observed.
- **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.*

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

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