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

1.1 Product identifier

Identification of the substance: Tetracycline hydrochloride

Article number: HP63
Registration number (REACH): This information is not available.
EC number: 200-593-8
CAS number: 64-75-5

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

Identified uses: laboratory chemical

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0
Telefax: +49 (0) 721 - 56 06 149
e-mail: sicherheit@carlroth.de
Website: www.carlroth.de

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

1.4 Emergency telephone number

Emergency information service: Poison Centre Munich: +49/(0)89 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

<table>
<thead>
<tr>
<th>Section</th>
<th>Hazard class</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>serious eye damage/eye irritation</td>
<td>(Eye Irrit. 2)</td>
<td>H319</td>
</tr>
<tr>
<td>3.7</td>
<td>reproductive toxicity</td>
<td>(Repr. 2)</td>
<td>H361d</td>
</tr>
</tbody>
</table>
For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2  Label elements

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

Signal word  Warning

Pictograms

Hazard statements

H319  Causes serious eye irritation.
H361d  Suspected of damaging the unborn child.

Precautionary statements

Precautionary statements - prevention

P280  Wear protective gloves/eye protection.

Precautionary statements - response

P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313  IF exposed or concerned: Get medical advice/attention.

For professional users only

Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Symbol(s)

H361d  Suspected of damaging the unborn child.
P280  Wear protective gloves/eye protection.
P308+P313  IF exposed or concerned: Get medical advice/attention.

2.3  Other hazards

There is no additional information.
 safet y data sheet
according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Tetracycl ine hydrochloride ≥900 µg/mg, CELLPURE®
article number: HP63

SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Tetracycline hydrochloride</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC number</td>
<td>200-593-8</td>
</tr>
<tr>
<td>CAS number</td>
<td>64-75-5</td>
</tr>
<tr>
<td>Molecular formula</td>
<td>C_{22}H_{25}ClN_{2}O_{8}</td>
</tr>
<tr>
<td>Molar mass</td>
<td>480.9 g/mol</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes
Take off contaminated clothing.

Following inhalation
Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact
Rinse skin with water/shower.

Following eye contact
Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion
Rinse mouth. Do not induce vomiting. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

4.2 Most important symptoms and effects, both acute and delayed
Irritation

4.3 Indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Co-ordinate fire-fighting measures to the fire surroundings
water spray, foam, dry extinguishing powder, carbon dioxide (CO2)

Unsuitable extinguishing media
water jet
5.2 **Special hazards arising from the substance or mixture**

**Hazardous combustion products**
In case of fire may be liberated: nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2), hydrogen chloride (HCl)

5.3 **Advice for firefighters**
Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

### SECTION 6: Accidental release measures

6.1 **Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**
Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Do not breathe dust. Avoid contact with skin, eyes and clothes.

6.2 **Environmental precautions**
Keep away from drains, surface and ground water.

6.3 **Methods and material for containment and cleaning up**

**Advices on how to contain a spill**
Covering of drains.

**Advices on how to clean up a spill**
Take up mechanically. Control of dust.

**Other information relating to spills and releases**
Place in appropriate containers for disposal.

6.4 **Reference to other sections**

### SECTION 7: Handling and storage

7.1 **Precautions for safe handling**
Provide adequate ventilation.

**Advice on general occupational hygiene**
Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

7.2 **Conditions for safe storage, including any incompatibilities**
Store in a dry place. Keep container tightly closed. Keep in a cool place.

**Incompatible substances or mixtures**
Observe hints for combined storage.

**Consideration of other advice**

- **Ventilation requirements**
Use local and general ventilation.
Recommended storage temperature: -20 °C.

No information available.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Data are not available.

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection.

Skin protection

• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

• type of material

NBR (Nitrile rubber)

• material thickness

>0,11 mm

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Keep away from drains, surface and ground water.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

**Appearance**
- Physical state: solid
- Colour: yellow
- Odour: odourless
- Odour threshold: No data available

**Other physical and chemical parameters**
- **pH (value)**: 2.5 (4.8 g/l, 20 °C)
- **Melting point/freezing point**: 215 - 220 °C
- **Initial boiling point and boiling range**: This information is not available.
- **Flash point**: not applicable
- **Evaporation rate**: no data available
- **Flammability (solid, gas)**: Non-flammable

**Explosive limits**
- **lower explosion limit (LEL)**: this information is not available
- **upper explosion limit (UEL)**: this information is not available
- **Explosion limits of dust clouds**: these information are not available
- **Vapour pressure**: This information is not available.
- **Density**: This information is not available.
- **Vapour density**: This information is not available.
- **Relative density**: Information on this property is not available.

**Solubility(ies)**
- **Water solubility**: 20 g/l at 20 °C

**Partition coefficient**
- **n-octanol/water (log KOW)**: This information is not available.

**Auto-ignition temperature**: Information on this property is not available.

**Decomposition temperature**: no data available

**Viscosity**: not relevant (solid matter)

**Explosive properties**: Shall not be classified as explosive

**Oxidising properties**: none
There is no additional information.

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Violent reaction with: Strong oxidiser

Direct light irradiation. Protect from moisture.

There is no additional information.

Hazardous combustion products: see section 5.

Shall not be classified as acutely toxic.

Shall not be classified as corrosive/irritant to skin.

Causes serious eye irritation.

Shall not be classified as a respiratory or skin sensitiser.

Reproductive toxicity:

• Specific target organ toxicity - single exposure
  Shall not be classified as a specific target organ toxicant (single exposure).

• Specific target organ toxicity - repeated exposure
  Shall not be classified as a specific target organ toxicant (repeated exposure).
Tetracycline hydrochloride ≥900 µg/mg, CELLPURE®

article number: HP63

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics
• If swallowed
gastrointestinal complaints
• If in eyes
data are not available
• If inhaled
data are not available
• If on skin
data are not available

Other information
None

SECTION 12: Ecological information

12.1 Toxicity
acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Source</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>220 mg/l</td>
<td>Salvelinus namaycush</td>
<td>96 h</td>
<td></td>
</tr>
</tbody>
</table>

12.2 Process of degradability
Theoretical Oxygen Demand with nitrification: 1,638 mg/mg
Theoretical Oxygen Demand: 1,497 mg/mg
Theoretical Carbon Dioxide: 2,013 mg/mg

12.3 Bioaccumulative potential
Data are not available.

12.4 Mobility in soil
Data are not available.

12.5 Results of PBT and vPvB assessment
Data are not available.

12.6 Other adverse effects
Data are not available.
Tetracycline hydrochloride  ≥900 µg/mg, CELLPURE®
article number: HP63

SECTION 13: Disposal considerations

13.1 Waste treatment methods
This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information
Do not empty into drains.

13.2 Relevant provisions relating to waste
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.3 Remarks
Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number
(not subject to transport regulations)

14.2 UN proper shipping name
not relevant

14.3 Transport hazard class(es)
not relevant

14.4 Packing group
not relevant

14.5 Environmental hazards
none (non-environmentally hazardous acc. to the dangerous goods regulations)

14.6 Special precautions for user
There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations
• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
Not subject to ADR, RID and ADN.
• International Maritime Dangerous Goods Code (IMDG)
Not subject to IMDG.
• International Civil Aviation Organization (ICAO-IATA/DGR)
Not subject to ICAO-IATA.
SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

- Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)
  Not listed.
- Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)
  Not listed.
- Regulation 850/2004/EC on persistent organic pollutants (POP)
  Not listed.
- List of substances subject to authorisation (REACH, Annex XIV)
  Not listed

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II
  Not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)
  Not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)
  Not listed

National inventories

Substance is listed in the following national inventories:

- EINECS/ELINCS/NLP (Europe)
- REACH (Europe)

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

16.1 Indication of changes (revised safety data sheet)

<table>
<thead>
<tr>
<th>Section</th>
<th>Former entry (text/value)</th>
<th>Actual entry (text/value)</th>
<th>Safety-relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2</td>
<td>Conditions for safe storage, including any incompatibilities: Store in a dry place. Keep container tightly closed.</td>
<td>Conditions for safe storage, including any incompatibilities: Store in a dry place. Keep container tightly closed.</td>
<td>no</td>
</tr>
<tr>
<td>7.2</td>
<td>• Specific designs for storage rooms or vessels: Recommended storage temperature: 15 - 20 °C.</td>
<td>• Specific designs for storage rooms or vessels: Recommended storage temperature: -20 °C.</td>
<td>no</td>
</tr>
</tbody>
</table>

Abbreviations and acronyms
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

**Key literature references and sources for data**
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

**List of relevant phrases (code and full text as stated in chapter 2 and 3)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
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<tbody>
<tr>
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