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

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

E-mail (competent person): sicherheit@carlroth.de

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>
Remarks
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.
Take off contaminated clothing. Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice. Rinse skin with water/shower. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist. 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).

**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>C₂₂H₂₅ClN₂O₈</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
Combustible.

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

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

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.

Keep away from drains, surface and ground water.

Covering of drains.

Take up mechanically. Control of dust.

Place in appropriate containers for disposal.


Provide adequate ventilation.

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

Store in a dry place. Keep container tightly closed. Keep in a cool place.

Advise on combined storage.

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 goggles 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:
Suspected of damaging the unborn child

- 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).
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></td>
<td>96 h</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.
This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Do not empty into drains.

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

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.

There is no additional information.

The cargo is not intended to be carried in bulk.

Not subject to ADR, RID and ADN.

Not subject to IMDG.

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

Malta (en)
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.

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