

## 1 Identification

- **Product identifier**
- **Trade name:** Tetracycline Hydrochloride, USP
- **Article number:** 199856
- **CAS Number:**  
64-75-5
- **EC number:**  
200-593-8
- **Molecular Formula** C<sub>22</sub> H<sub>24</sub> N<sub>2</sub> O<sub>8</sub> · HCl
- **Molecular Weight** 480.91
- **Application of the substance / the mixture** For Research Use Only
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
MP Biomedicals, LLC  
29525 Fountain Parkway  
Solon, OH 44139  
United States  
www.mpbio.com
- **Information department:** Quality Control Department
- **Emergency telephone number:** CHEMTREC: 1-800-424-9300 (1-703-527-3887)

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Repr. 2 H361-H362 Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Warning
- **Hazard-determining components of labeling:**  
Tetracycline Hydrochloride
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.

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*Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.*

*May cause respiratory irritation.*

· **Precautionary statements**

*Obtain special instructions before use.*

*Do not handle until all safety precautions have been read and understood.*

*Do not breathe dusts or mists.*

*Avoid contact during pregnancy/while nursing.*

*Wash thoroughly after handling.*

*Do not eat, drink or smoke when using this product.*

*Use only outdoors or in a well-ventilated area.*

*Wear protective gloves/protective clothing/eye protection/face protection.*

*If on skin: Wash with plenty of water.*

*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

*Continue rinsing.*

*IF exposed or concerned: Get medical advice/attention.*

*Call a poison center/doctor if you feel unwell.*

*Specific treatment (see on this label).*

*If skin irritation occurs: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*Take off contaminated clothing and wash it before reuse.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**



Health = \*3

Fire = 0

Reactivity = 1

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

64-75-5 Tetracycline Hydrochloride

· **Identification number(s)**

· **EC number:** 200-593-8

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## 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.
- **After inhalation:** If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.
- **After skin contact:** Wash off with soap and plenty of water. Consult a Doctor.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically, dispose contaminated material as waste according to Section 13.  
Ensure adequate ventilation.
- **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.
- **Protective Action Criteria for Chemicals**

· PAC-1:

19 mg/m<sup>3</sup>

· PAC-2:

210 mg/m<sup>3</sup>

· PAC-3:

1,300 mg/m<sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes.  
Open and handle receptacle with care.

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- **Information about protection against explosions and fires:** *Keep respiratory protective device available.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** *-20°C*
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Further information about storage conditions:** *Protect from exposure to the light.*
- **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 Section 7.*
- **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.*
- **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:**  
*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.*
- **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.*

- **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.*

- **Eye protection:**



Tightly sealed goggles

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## 9 Physical and chemical properties

|   |                    |
|---|--------------------|
| · <b>Information on basic physical and chemical properties</b>        |                    |
| · <b>General Information</b>  |                    |
| · <b>Appearance:</b>  |                    |
| · <b>Form:</b>  | Crystalline powder |
| · <b>Color:</b>   | Yellow             |
| · <b>Odor:</b> Indeterminate  |                    |
| · <b>Odor threshold:</b> Not determined.                              |                    |
| · <b>pH-value:</b> Not applicable.                                    |                    |
| · <b>Change in condition</b>  |                    |
| · <b>Boiling point/Boiling range:</b>                                 | Undetermined.      |
| · <b>Flash point:</b> Not applicable.                                 |                    |
| · <b>Flammability (solid, gaseous):</b> Product is not flammable.     |                    |
| · <b>Decomposition temperature:</b> Not determined.                   |                    |
| · <b>Auto igniting:</b> Not determined.                               |                    |
| · <b>Danger of explosion:</b> See section 10                          |                    |
| · <b>Explosion limits:</b>  |                    |
| · <b>Lower:</b>   | Not Applicable     |
| · <b>Upper:</b>   | Not Applicable     |
| · <b>Vapor pressure:</b> Not applicable.                              |                    |
| · <b>Density:</b> Not Applicable                                      |                    |
| · <b>Relative density</b> Not determined.                             |                    |
| · <b>Vapor density</b> Not applicable.                                |                    |
| · <b>Evaporation rate</b> Not applicable.                             |                    |
| · <b>Solubility in / Miscibility with</b> Not Determined              |                    |
| · <b>Water:</b> Soluble.  |                    |
| · <b>Partition coefficient (n-octanol/water):</b> Not determined.     |                    |
| · <b>Viscosity:</b>   |                    |
| · <b>Dynamic:</b>   | Not applicable.    |
| · <b>Kinematic:</b>   | Not applicable.    |
| · <b>VOC content:</b> 0.00 %  |                    |
| 0.0 g/l / 0.00 lb/gl  |                    |
| · <b>Other information</b> No further relevant information available. |                    |

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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## 11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

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

|                                      |      |                     |
|--------------------------------------|------|---------------------|
| <b>ATE (Acute Toxicity Estimate)</b> |      |                     |
| Oral                                 | LD50 | 2,759 mg/kg (mouse) |

|   |      |                     |
|---|------|---------------------|
| <b>64-75-5 Tetracycline Hydrochloride</b> |      |                     |
| Oral                                      | LD50 | 2,759 mg/kg (mouse) |
|   |      | 6,443 mg/kg (rat)   |

- **Primary irritant effect:**

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

- **on the eye:** Irritating effect.

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

- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

|                          |  |  |
|--------------------------|--|--|
| Substance is not listed. |  |  |
|--------------------------|--|--|

- **NTP (National Toxicology Program)**

|                          |  |  |
|--------------------------|--|--|
| Substance is not listed. |  |  |
|--------------------------|--|--|

- **OSHA-Ca (Occupational Safety & Health Administration)**

|                          |  |  |
|--------------------------|--|--|
| Substance is not listed. |  |  |
|--------------------------|--|--|

## 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability:** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential:** No further relevant information available.

- **Mobility in soil:** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (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.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects:** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

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

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- **Uncleaned packagings:**
- **Recommendation:** Discard must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleaning agents.

## 14 Transport information

|  |                 |
|--|-----------------|
| <b>· UN-Number</b>   |                 |
| · DOT, ADR, IMDG, IATA   | Not regulated   |
| <b>· UN proper shipping name</b>   |                 |
| · DOT, ADR, IMDG, IATA   | Not regulated   |
| <b>· Transport hazard class(es)</b>  |                 |
| · DOT, ADR, IMDG, IATA   |                 |
| · Class  | Not regulated   |
| <b>· Packing group</b>   |                 |
| · DOT, ADR, IMDG, IATA   | Not regulated   |
| <b>· Environmental hazards:</b>  | Not applicable. |
| <b>· Special precautions for user</b>  | Not applicable. |
| <b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| <b>· UN "Model Regulation":</b>  | Not regulated   |

## 15 Regulatory information

|   |  |
|---|--|
| <b>· Safety, health and environmental regulations/legislation specific for the substance or mixture</b> |  |
| · Sara  |  |
| <b>· Section 355 (extremely hazardous substances):</b>  |  |
| Substance is not listed.  |  |
| <b>· Section 313 (Specific toxic chemical listings):</b>  |  |
| Substance is listed.  |  |
| <b>· TSCA (Toxic Substances Control Act):</b>   |  |
| Substance is listed.  |  |
| · TSCA new (21st Century Act) (Substances not listed)   |  |
| · Proposition 65  |  |
| <b>· Chemicals known to cause cancer:</b>   |  |
| Substance is not listed.  |  |
| <b>· Chemicals known to cause reproductive toxicity for females:</b>                                    |  |
| Substance is not listed.  |  |
| <b>· Chemicals known to cause reproductive toxicity for males:</b>                                      |  |
| Substance is not listed.  |  |
| <b>· Chemicals known to cause developmental toxicity:</b>   |  |
| Substance is listed.  |  |

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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07    GHS08

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Tetracycline Hydrochloride

· **Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.

May cause respiratory irritation.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dusts or mists.

Avoid contact during pregnancy/while nursing.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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### 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:** Quality Control Dept.
- **Date of preparation / last revision** 04/10/2018 / -
- **Abbreviations and acronyms:**

*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*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Skin Irrit. 2: Skin corrosion/irritation – Category 2*

*Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A*

*Repr. 2: Reproductive toxicity – Category 2*

*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*