1 Identification

- **Product identifier**
  - **Trade name:** Oxytetracycline Hydrochloride
  - **Article number:** 150145
  - **CAS Number:** 2058-46-0
  - **EC number:** 218-161-2
  - **Molecular Formula:** C22H24N2O9 · HCl
  - **Molecular Weight:** 496.9

- **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** Suspected of damaging fertility or the unborn child.

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

  - GHS08

- **Signal word** Warning

- **Hazard-determining components of labeling:**
  - oxytetracycline hydrochloride

- **Hazard statements**
  - Suspected of damaging fertility or the unborn child.

- **Precautionary statements**
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - IF exposed or concerned: Get medical advice/attention.
  - Store locked up.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Trade name: Oxytetracycline Hydrochloride

- Classification system:
  - NFPA ratings (scale 0 - 4)
    
    Health = 1  
    Fire = 0  
    Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  
  HEALTH  
  Health = *1  
  
  FIRE  
  Fire = 0  
  
  REACTIVITY  
  Reactivity = 0

- 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
  2058-46-0 oxytetracycline hydrochloride
- Identification number(s)
  - EC number: 218-161-2

4 First-aid measures

- Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Flush eyes with running water as a precaution.
  - 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 No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
  For personal protection see section 8.
Trade name: Oxytetracycline Hydrochloride

- **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.
- **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**: Substance is not listed.
  - **PAC-2**: Substance is not listed.
  - **PAC-3**: Substance is not listed.

7 Handling and storage

- **Handling**
  - **Precautions for safe handling**: Open and handle receptacle with care.
  - **Information about protection against explosions and fires**: Keep respiratory protective device available.
  - **Conditions for safe storage, including any incompatibilities**
    - **Storage**: 15-30°C
    - **Requirements to be met by storerooms and receptacles**: No special requirements.
    - **Further information about storage conditions**:
      - Protect from exposure to the light.
      - Store in nitrogen.
  - **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.
      - Wash hands before breaks and at the end of work.
      - Store protective clothing separately.
  - **Breathing equipment**: Not required.
  - **Protection of hands**:
    - **Protective gloves**
      - The glove material has to be impermeable and resistant to the product/substance/preparation.
      - Due to missing tests no recommendation to the glove material can be given for the product/substance/preparation/chemical mixture.
Trade name: Oxytetracycline Hydrochloride

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**: Not required.

9 Physical and chemical properties

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

  - **General Information**

    - **Form**: Powder
    - **Color**: Yellow
    - **Odor**: Indeterminate
    - **Odor threshold**: Not determined.

- **pH-value**: Not applicable.

- **Change in condition**

  - **Boiling point/Boiling range**: Undetermined.

- **Flash point**: Not applicable.

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

- **Decomposition temperature**: Not determined.

- **Auto igniting**: Not determined.

- **Danger of explosion**: See section 10

- **Explosion limits**

  - **Lower**: Not Applicable
  - **Upper**: Not Applicable

- **Vapor pressure**: Not applicable.

- **Density**: Not Applicable

  - **Relative density**: Not determined.
  - **Vapor density**: Not applicable.
  - **Evaporation rate**: Not applicable.

- **Solubility in / Miscibility with**

  - **Water**: Soluble.

  - **Partition coefficient (n-octanol/water)**: Not determined.

- **Viscosity**

  - **Dynamic**: Not applicable.
  - **Kinematic**: Not applicable.
  - **VOC content**: 0.00 %
  - **Solids content**: 100.0 %
Trade name: Oxytetracycline Hydrochloride

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.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- LD/LC50 values that are relevant for classification:
  2058-46-0 oxytetracycline hydrochloride

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50/C50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>6,696 mg/kg (mouse)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Irritant and potentially harmful
  - 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)
    - rat - equivocal evidence
  - 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.
### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:**
    - Can not be disposed together with household garbage. Do not allow product to reach sewage system.

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

### 14 Transport information

- **UN-Number**
  - DOT, ADR, ADN, IMDG, IATA: Not regulated

- **UN proper shipping name**
  - DOT, ADR, ADN, IMDG, IATA: Not regulated

- **Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA: Not regulated

- **Packing group**
  - DOT, ADR, IMDG, IATA: Not regulated

- **Environmental hazards:**
  - Marine pollutant: No

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

- **UN "Model Regulation"**: Not regulated

### 15 Regulatory information

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

  - **Sara**
    - **Section 355 (extremely hazardous substances):**
      - Substance is not listed.
    - **Section 313 (Specific toxic chemical listings):**
      - Substance is not listed.

  - **TSCA (Toxic Substances Control Act):**
    - Substance is listed.

  - **TSCA new (21st Century Act) (Substances not listed)**
    - Substance 2058-46-0: oxytetracycline hydrochloride

(Contd. of page 5)
Trade name: Oxytetracycline Hydrochloride

- Proposition 65
  - Chemicals known to cause cancer:
    Substance is not listed.
  - Chemicals known to cause reproductive toxicity for females:
    Substance is not listed.
  - Chemicals known to cause reproductive toxicity for males:
    Substance is not listed.
  - Chemicals known to cause developmental toxicity:
    Substance is listed.

- 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
  GHS08

- Signal word
  Warning

- Hazard-determining components of labeling:
  oxytetracycline hydrochloride

- Hazard statements
  Suspected of damaging fertility or the unborn child.

- Precautionary statements
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If exposed or concerned: Get medical advice/attention.
  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.

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 08/06/2018 / -
- 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
Trade name: Oxytetracycline Hydrochloride

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
Repr. 2: Reproductive toxicity - Category 2