Physical Specifications

CAS# 64-75-5
Molecular Formula C₂₂H₂₄N₂O₈HCl
Molecular Weight 480.90
Potency Min. 900 μg/mg
pH (1%, water) 2.3 ± 0.5
Moisture Max. 2.0%
4-ephianhydrotetracycline Max. 2.0%

Molecular Biology Specifications

Antibiotic Inhibition/Sensitivity Assay Pass

Recommended Use

Tetracycline Hydrochloride is used at the following working conditions:

<table>
<thead>
<tr>
<th>Stock Solution</th>
<th>Working Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetracycline Hydrochloride 5mg/mL in H₂O.</td>
<td>Stringent Relaxed</td>
</tr>
<tr>
<td></td>
<td>Plasmids Plasmids</td>
</tr>
<tr>
<td></td>
<td>10μg/mL 50μg/mL</td>
</tr>
</tbody>
</table>

NOTE: Stock solution of antibiotics dissolved in H₂O should be sterilized by filtration through a 0.22-micron filter.

Storage

Store at +4°C. Warm to room temperature before opening. Keep tightly sealed. Store Tetracycline Hydrochloride solution in a light-tight container at -20°C

Warning


Product Specifications

TETRACYCLINE HCl

Catalog # Size
IB02200 25gm
1. Identification of the Substance/ Mixture and the Company/ Undertaking

Product Name: Tetracycline Hydrochloride
Product Code: IB02200
Recommend Use: For further manufacturing use only
Not for human or animal drug use
Antibiotic/antimycotic for cell culture, blocks the binding of tRNA to the 30S subunit

Synonyms:
ACHROMYCIN HYDROCHLORIDE * ALA TET * AMYCIN, HYDROCHLORIDE *
ARTOMYCIN * BRISTACYCLINE * CANCYCLINE-250 * CEFRACYCLINIE TABLETS * CHLORHYDRATE DE TETRACYCLINE (FRENCH) *
CHLOROWODORKU TETRACYKLINY (POLISH) * CYCLOPAR * DIACYCLINE *
DUMOCYCLIN * HOSTACYCLINE * MEDAMYCIN * MEPHACYCLIN *
NCI-C55561 * NEOCYCLINE B * PALTET * PANMYCIN HYDROCHLORIDE *
PARTREX * PIRACAPS * POLYCYCLINE HYDROCHLORIDE * POLYOTIC OINTMENT * QIDTET * QUADRACYCLINE * QUATREX * REMICYCLIN *
RICYCLINE * RO-CYCLINE * SANCLOMYCINE * SANCLOMYCINE * STECLIN *
* STILCICLINA * SUBAMYCIN * SUMYCIN * SUPRAMYCIN * TEFLIN *
TILINE * TELOTREX * TET-CY * TETRABAKAT * TETRABID * TETRABLET *
TETRACAPS * TETRACHEL * TETRACILINA CLORIDRATO (ITALIAN) *
* TETRACOMPREN * TETRACYCLINE CHLORHYDRATE *
TETRACYCLINEHYDROCHLORIDE * TETRA-D * TETRAKAP * TETRALUTION *
* TETRAMAVAN * TETRA-WEDEL * TETROSOL * TOPICYCLINE *
TRIPHACYCLIN * U-5965 * UNICIN * UNIMYCIN * VETQUAMYCIN-324 *

Company: IBI SCIENTIFIC
9861 Kapp Court
Peosta, IA  52068

Emergency Tele. Number: 3E Company (Acct# 9027) 1-800-451-8346 / (001) 760-602-8703
Company Tele. Number: 1-800-253-4942 / (001) 563-690-0484
E-Mail Address: info@ibisci.com

2. Hazardous Identification

GHS – Classification

Classification:
Skin Irritant 2 Eye Irritant 2 Germ Cell Mutagenicity 1B Toxic to Reproduction 1B
Respiratory Sensitizer 1 Skin Sensitizer 1 Acute Toxicity Oral 3

Signal Word: Danger
Hazard Statements:  
H315-Causes skin irritation  
H319-Causes serious eye irritation  
H335-May cause respiratory irritation  
H340-May cause genetic defects  
H317-May cause an allergic skin reaction  
H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H301-Toxic if swallowed

Precautionary Statements:  
P264-Wash hands thoroughly after handling  
P280-Wear protective gloves/protective clothing/eye protection/face protection/  
P201-Obtain special instructions before use  
P202-Do not handle until all safety precautions have been read and understood  
P271-Use only outdoors or in a well-ventilated area  
P262-Do not get in eyes, on skin, or on clothing  
P270-Do not eat, drink, or smoke when using this product.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name:</th>
<th>Tetracycline Hydrochloride</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC No.:</td>
<td>EEC No. 200-593-8</td>
</tr>
<tr>
<td>REACH Reg. No.:</td>
<td>Not Available</td>
</tr>
<tr>
<td>CAS No.:</td>
<td>64-75-5</td>
</tr>
<tr>
<td>Weight %:</td>
<td>95 – 100</td>
</tr>
<tr>
<td>Classification:</td>
<td></td>
</tr>
</tbody>
</table>

4. First Aid Measures

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact: Wash off immediately with soap and plenty of water, removing all contaminated clothes and shoes.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen.

Ingestion: Clean mouth with water and afterwards drink plenty of water.

Notes to Physician: Treat symptomatically.

5. Fire Fighting Measures

Flammable Properties: Not flammable

Flash Point: Not determined

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous Combustion Products: Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

Explosion Data

- Sensitivity to Mechanical Impact: Not sensitive
- Sensitivity to Static Discharge: Not sensitive

Protective Equip. & Precautions for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equiv.) and full protective gear.

6. Accidental Release Measures

Personal Precautions: Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Ensure adequate ventilation.

Methods for Containment: Prevent further leakage or spillage, if safe to do so.

Methods for Cleaning Up: Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. Handling and Storage

Handling: Handle in accordance with good industrial hygiene and safety practice. Light Sensitive.

Storage: Keep container tightly closed in a dry and well ventilated place. Protect from light.

Incompatible Products: Strong oxidizing agents.
8. Exposure Controls / Personal Protection

Chemical Name: Tetracycline Hydrochloride - #64-75-5
ACGIH TLV: -
OSHA PEL: -
NIOSH IDLH: -

Engineering Measures: Showers, Eyewash Stations, Ventilation Systems

Personal Protective Equipment
Eye/Face Protection: Tightly fitting safety goggles.
Skin & Body Protection: Wear protective gloves/clothing.
Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Appearance: Yellow powder
Odor: No information available
Odor Threshold: No information available
Decomposition Temp. °C: No information available
Freezing Point: No information available
Initial Boiling Point: No information available
Physical State: Powder
pH: No data available
Flash Point: Not determined
Autoignition Temp. °C: No data available
Boiling Point/Range: No data available
Melting Point/Range: 214°C
Flammability Limits (Air): Upper-No data available * Lower-No data available
Explosive Properties: No information available
Oxidizing Properties: No information available
Evaporation Rate: No information available
MMHG @ 37.8°C: No data available
Vapor Density: No data available
Specific Gravity: No information available
Density: No information available
Solubility: No information available
Water Solubility: No information available
Partition Coefficient (n-octanol/water): No data available
Viscosity: No information available

10. Stability and Reactivity

Stability: Stable under recommended storage conditions
Incompatible Products: Strong oxidizing agents
Conditions to Avoid: Exposure to light
Hazardous Decomposition Products: Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.
Hazardous Polymerization: Hazardous polymerization does not occur.
11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information: Toxic by inhalation and if swallowed. Causes skin, eye, and respiratory tract irritation. Sensitizer.

Chemical Name: Tetracycline Hydrochloride - #64-75-5

LD50 Oral: 6443mg/kg (Rat)
LD50 Dermal: -
LC50 Inhalation: -

Chronic Toxicity

Chronic Toxicity: Suspected teratogen

Target Organ Effects: Liver, Teeth

12. ECOLOGICAL INFORMATION

Ecotoxicity: The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

Water Disposal Method: Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging: Dispose of in accordance with all federal, state, and local regulations.

14. TRANSPORT INFORMATION

IATA: Not regulated

US DOT: Not regulated

15. TOXICOLOGICAL INFORMATION

REACH Title VII Restrictions

Chemical Name: Tetracycline Hydrochloride - #64-75-5

Dangerous Substances: Not applicable

Organic Solvents: Not applicable

Harmful Substances Whose Names are to be indicated on the Label: Not applicable

Pollution Release and Transfer Registry (Class II): Not applicable

Pollution Release and Transfer Registry (Class I): Not applicable

Poison and Deleterious Substances Control Law: Not applicable

ISHA – Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying: Not applicable

ISHA – Harmful Substances Requiring Permission: Not applicable

Toxic Chemical Classification Listing (TCCL): Not applicable

Toxic Release Inventory (TRI) – Group I: Not applicable

Toxic Release Inventory (TRI) – Group II: Not applicable

International Inventories

TSCA: Complies

EINECS/ELINCS: Complies

ENCS: Does not Comply

IECSC: Complies

KECL: Complies

PICCS: Does not Comply

AICS: Complies
U.S. Federal Regulations
SARA 313
Section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical/chemicals which are subject to the reporting requirements of the Act & Title 40 of the Code of Federal Regulations, part 372.

Chemical Name: Tetracycline Hydrochloride - #64-75-5
Weight (%): 95 – 100
SARA 313 – Threshold (%): 1.0

SARA 311/312 Hazard Categories
Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

Clean Water Act
This product does not contain any substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act
Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61). This product does not contain any substances which are listed hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act.

CERCLA

U.S. State Regulations
California Proposition 65
This product contains the following Proposition 65 chemicals.
Chemical Name: Tetracycline Hydrochloride - #64-75-5
California Prop. 65: Developmental

International Regulations
Mexico
No information available

Canada
No information available

WHMIS Hazard Class
D2A – Very toxic materials
D2B – Toxic materials

16. OTHER INFORMATION

Issuing Date: 07-Sept-2001
Revision Date: 09-Jan-2012
Revision Note: Update to GHS Standard
Recommended Restrictions: No information available
Disclaimer: The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release; and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the test.

End of MSDS