

# DATA SHEET

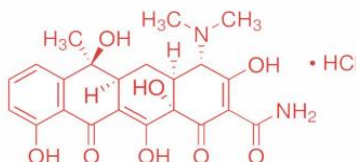
Version: 2  
Revision date: 24/02/23

## 1. Identification

<b>Product name</b>	<b>Tetracycline Hydrochloride</b>
	25 g
<b>Cat. No</b>	<b>AB009</b>

## 2. Description

Tetracycline Hydrochloride is an antibiotic active against a wide range of gram-negative and gram-positive bacteria. The parent compound chlortetracycline was first isolated from *Streptomyces aureofaciens* in 1947. Soon after, other natural tetracyclines were isolated, including tetracycline, for which the family of molecules is named. The tetracyclines exert their antibiotic effect primarily by binding to the bacterial ribosome and halting protein synthesis. Upon binding the ribosome, the tetracyclines allosterically inhibit binding of the amino acyl-tRNA at the acceptor site, and protein synthesis ceases.



## 3. Specifications

- CAS Number: 64-75-5
- MDL: MFCD00078142
- Formula:  $C_{22}H_{24}N_2O_8 \cdot HCl$
- Formula Weight: 480.90 g/mol
- Solubility: Soluble in water, methanol or 100% ethanol
- Formulation: Yellow crystalline solid

## 4. Storage specifications

Store at -20° C

## 5. Applications

- Used to select for TetR transformed cells or other tetracycline resistance genes.
- Tetracycline hydrochloride is used in tetracycline-controlled gene expression systems (gene switches) such as the Tet-on and Tet-off systems.
- Used for the prevention of bacterial contamination of cell cultures. Recommended for use in cell culture applications at 10 mg/L

## 6. Further information

<b>Product Use Limitation</b>	This product is developed, designed and sold exclusively only for research purposes use. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.
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