

# DATA SHEET

Version: 2  
Revision date: 24/02/23Tlf: +34 983 54 85 63  
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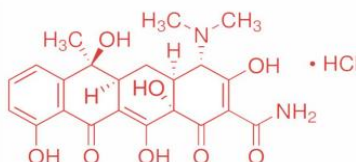
## 1. Identification

**Product name** **Tetracycline Hydrochloride**  
25 g

**Cat. No** **AB009**

## 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
- Potency:  $\geq 950 \mu\text{g}/\text{mg}$

## 4. Storage specifications

Store the powder at 4 °C. After reconstitution, store stock solutions at -20 °C. Short-term storage at 4 °C is acceptable.

## 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

**Product Use Limitation** 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.

**Disclaimer** The information provided in this Data Sheet is correct to the best of our knowledge and belief at the date of publication. This information is intended only as a guide and should not be taken as a warranty or quality specification. Canvax Reagents S.L.U. shall not be held liable for any damage resulting from handling or from contact with the above product.





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