**Chlortetracycline Hydrochloride**

**Product Information**

**Product ID** C2951  
**CAS No.** 64-72-2  
**Chemical Name** 7-Chloro-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide monohydrochloride  
**Synonym** Aureocicilina, Isphamycin.  
**Formula** C_{22}H_{23}ClN_{2}O_{8} \cdot HCl  
**Formula Wt.** 515.35  
**Melting Point** >210 °C (dec)  
**Purity** ≥85%  
**Solubility** Soluble at about 28°C of:  
- water (13 mg/mL),  
- methanol (17.4 mg/mL) or  
- ethanol (1.7 mg/mL).  
**Store Temp** Ambient  
**Ship Temp** Ambient  
**Description** Chlortetracycline is a tetracycline antibiotic that also exhibits antioxidative, anti-parasitic, and neuroprotective activities. Chlortetracycline binds the 30S subunit of the bacterial ribosome, inhibiting protein synthesis; it also displays antibacterial and antimalarial properties. Additionally, this compound acts as a radical scavenger. In vivo, chlortetracycline suppresses calpain activity and weakly antagonizes NMDA receptor activity and Ca2+ influx, protecting against cerebral ischemia.

**References**  

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.