



4-Epitetracycline HCl, EvoPure[®]

PRODUCT DATA SHEET

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Product Name:	4-Epitetracycline HCl, EvoPure [®]
Product Number:	T053
CAS Number:	23313-80-6
Molecular Formula:	C ₂₂ H ₂₄ N ₂ O ₈ · xHCl (lot specific)
Molecular Weight:	444.43 g/mol (Free base. Actual molecular weight shown on lot specific certificate of analysis).
Form:	Powder
Appearance:	Yellow Solid
Source:	Synthetic
Storage Conditions:	-20°C. Protect from moisture and light
Description:	<p>4-Epitetracycline HCl, EvoPure[®] is a highly purified hydrochloride salt form of 4-Epitetracycline. Under acidic conditions, Tetracycline undergoes an epimerization at the fourth carbon, producing a mixture of Tetracycline and 4-Epitetracycline. This EvoPure product is soluble in water.</p> <p>For other Tetracycline products, click here.</p>
Mechanism of Action:	<p>Tetracycline inhibits the growth of Gram-positive and Gram-negative bacteria by disrupting codon-anticodon interactions at the ribosome, thus blocking protein synthesis. Specifically, Tetracycline binds to the 30S ribosomal subunit and blocks the attachment of charged aminoacyl-tRNA to the A site on the ribosome, preventing peptide elongation.</p>
Spectrum:	Effective against Gram-positive and Gram-negative bacteria, and <i>Mycoplasma</i> .
Technical Data:	HPLC, NMR, FTIR, and MS analysis may be available. For more info, please email info@toku-e.com .
References:	<p>Mazur X, Eppenberger HM, Bailey JE and FUsenegger M (2000) A novel autoregulated proliferation-controlled production process using recombinant CHO cells. <i>Biotechnol and Bioeng.</i> 65(2):144-150</p> <p>Fernandez AA, Noceda VT, Carrera ES (1969) Simultaneous separation and quantitative determination of tetracycline, anhydrotetracycline, 4-epitetracycline, and 4-epi-anhydrotetracycline in degraded tetracyclines by thin-layer chromatography. <i>J. Pharm. Sci.</i> 58(4):443-446</p>