

#### PRODUCT DATA SHEET

Code No.: BIA-O1507

Pack sizes: 5 mg, 25 mg

# Oxytetracycline hydrochloride

Synonyms : 5-Hydroxytetracycline hydrochlride, Terramycin hydrochloride, Oxytetrin, Tetran hydrochloride

## Specifications

CAS # : 2058-46-0 Molecular Formula :  $C_{22}H_{25}CIN_2O_9$ 

Molecular Weight : 496.9

Source : Streptomyces sp.

Appearance : Yellow to orange solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.

### Application Notes

Oxytetracycline hydrochloride is a salt prepared from oxytetracycline taking advantage of the basic dimethylamino group which protonates readily to form the salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Like all tetracyclines, oxytetracycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis.

#### References

- 1. Terramycin, a new antibiotic. Finlay A.C. et al., Science 1950, 111, 85.
- 2. The structure of terramycin. Hochstein F.A.J. et al., Am. Chem. Soc. 1953, 75, 5455. 3.
- 3. Quantitative analysis of oxytetracycline and its impurities by LC-MS-MS. Lykkeberg A.K. et al., J. Pharm. Biomed. Anal. 2004, 34, 325.

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