

### PRODUCT DATA SHEET

Code No.: BIA-O1336

Pack sizes: 5 mg, 25 mg

# Oxytetracycline

Synonyms : Terramycin

## Specifications

CAS # : 79-57-2 Molecular Formula :  $C_{22}H_{24}N_2O_9$ 

Molecular Weight : 460.4

Source : Streptomyces sp.

Appearance : Light tan solid

Purity : >95% by HPLC

Long Term Storage : -20°C

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

## **Application Notes**

Oxytetracycline (terramycin) is a linear, tetracyclic broad spectrum antibiotic originally isolated from Streptomyces rimosus in 1949. 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. Oxytetracycline, although less coloured than other tetracyclines, is still a pigment and is thus sensitive to environmental and storage conditions. Commercial oxytetracycline may contain significant levels of degradation products.

#### 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. 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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