Thiamphenicol

Synonyms: Thiocymetin, Thiophenicol, Win 5062-2, NSC 522822

Specifications

CAS #: 15318-45-3
Molecular Formula: C_{12}H_{15}Cl_{2}NO_{5}S
Molecular Weight: 356.2
Source: Synthetic
Appearance: White solid
Purity: >99% by HPLC
Long Term Storage: -20°C
Solubility: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Thiamphenicol is a semi-synthetic chloramphenicol prepared by total synthesis from thiophenol in which the nitro moiety of chloramphenicol is replaced by a methylsulphone, first synthesised at Sterling Winthrop in 1952. Thiamphenicol is a broad spectrum antibiotic with good activity against Gram negative and anaerobic bacteria. Thiamphenicol acts by binding to the 23S sub-unit of the 50S ribosome inhibiting protein synthesis. Thiamphenicol has been extensively studied with over 800 literature citations.

References