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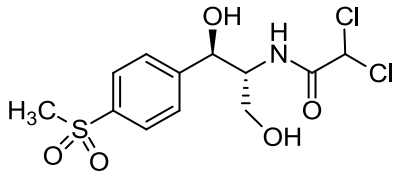
PRODUCT DATA SHEET

Thiamphenicol

Code No.: **BIA-T1486**

Pack sizes: **25 mg, 100 mg**



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

Specifications

CAS #	:	**15318-45-3**
Molecular Formula	:	**$C_{12}H_{15}Cl_2NO_5S$**
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

1. New antibacterial agents. 2-Acylamino-1-(4-hydrocarbonylsulfonylphenyl)-1,3-propanediols and related compounds. Culter R.A. et al. J. Am. Chem. Soc. 1952, 74, 5475.
2. New antibacterial agents. II. An alternate synthesis of dl-threo-2-dichloro-acetamido-1-(4-methylsulfonylphenyl)-1,3-propanediol. Suiter C.M. et al. J. Am. Chem. Soc. 1953, 75, 4330.
3. In vitro activity of chloramphenicol and thiamphenicol analogs. Neu H.C. & Fu K.P. Antimicrob. Agents Chemother. 1980, 18, 311.

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