

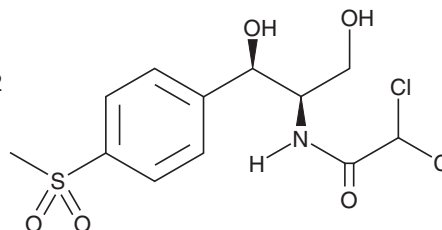
PRODUCT INFORMATION



Thiamphenicol

Item No. 21357

CAS Registry No.: 15318-45-3
Formal Name: 2,2-dichloro-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)-2-[4-(methylsulfonyl)phenyl]ethyl]-acetamide
Synonyms: NSC 522822, (+)-Thiamphenicol, Thiophenicol, WIN 5,603-2
MF: C₁₂H₁₅Cl₂NO₅S
FW: 356.2
Purity: ≥98%
UV/Vis.: λ_{max}: 225, 266 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

Thiamphenicol is supplied as a crystalline solid. A stock solution may be made by dissolving the thiamphenicol in the solvent of choice. Thiamphenicol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of thiamphenicol in ethanol is approximately 200 µg/ml and approximately 30 mg/ml in DMSO and DMF.

Thiamphenicol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, thiamphenicol should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Thiamphenicol has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Thiamphenicol is an antibiotic derived from chloramphenicol that displays a similar spectrum of activity with enhanced potency.¹⁻³ It displays good *in vitro* activity against a range of multidrug resistant pathogens, including penicillin-resistant strains and methicillin-resistant *S. aureus*.²

References

1. Feder, Jr., H.M., Osier, C., and Maderazo, E.G. Chloramphenicol: A review of its use in clinical practice. *Rev. Infect. Dis.* **3**(3), 479-91 (1981)
2. Marchese, A., Debbia, E.A., Tonoli, E., et al. *In vitro* activity of thiamphenicol against multiresistant *Streptococcus pneumoniae*, *Haemophilus influenzae* and *Staphylococcus aureus* in Italy. *J. Chemother.* **14**(6), 554-561 (2002).
3. Raymond, J., Boutros, N., and Bergeret, M. Role of thiamphenicol in the treatment of community-acquired lung infections. *Med. Trop. (Mars)* **64**(1), 33-38 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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