

PRODUCT DATA SHEET

Code No.: BIA-C1477

Pack sizes: 5 mg, 25 mg

Chloramphenicol palmitate

Synonyms : Chloramphenicol 3-palmitate

Specifications

CAS # : 530-43-8

Molecular Formula : C₂₇H₄₂Cl₂N₂O₆

Molecular Weight : 561.5

Source : Semi-synthetic

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

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

Application Notes

Chloramphenicol palmitate is prepared by acylation of chloramphenicol with palmitic acid. Although chloramphenicol palmitate is a more hydrophobic drug which should enhance bioavailability, the primary advantage of the ester is to mask the taste of chloramphenicol in oral formulations. Chloramphenicol palmitate is significantly less active than chloramphenicol but acts as a prodrug, being readily hydrolysed by acid and esterase in the gut to release chloramphenicol.

References

1. The structure of chloramphenicol palmitate. Edgerton W.H. et al., J. Am. Chem. Soc. 1955, 77, 27.

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