

PRODUCT DATA SHEET

Code No.: BIA-C1477

Pack sizes: 5 mg, 25 mg

$$O_2N$$
 O_2N
 O_2
 O_3
 O_4
 O_4
 O_5
 O_5
 O_7
 O_8
 $O_$

Synonyms : Chloramphenicol 3-palmitate

Specifications

CAS # : 530-43-8 Molecular Formula : $C_{27}H_{42}CI_2O_6$

Molecular Weight : 561.5

Source : Semi-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

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.

Updated: 2 December 2014