

Sancycline hydrochloride

## PRODUCT DATA SHEET

Code No.: BIA-S1534

Pack sizes: 1 mg, 5 mg

Synonyms : 6-Demethyl-6-deoxytetracycline hydrochloride, NSC 51812

Specifications

CAS # : 6625-20-3

Molecular Formula :  $C_{21}H_{23}CIN_2O_7$ 

Molecular Weight : 450.9

Source : Semi-synthetic

Appearance : Yellow to orange solid

Purity : >98% by HPLC

Long Term Storage : -20°C

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

## **Application Notes**

Sancycline hydrochloride is the hydrochloride salt of a rare semi-synthetic tetracycline prepared by hydrogenolysis of the chloro and benzylic hydroxy moieties of declomycin, first reported in 1962. As the simplest of the early tetracyclines, sancycline was the first to be totally synthesised by Conover and co-workers. Like other tetracyclines, sancycline acts by reversibly binding to the 30S ribosomal subunit and inhibiting protein translation by blocking entry of aminoacyl-tRNA into the ribosome A site.

## References

- Process for the catalytic reduction of 6-hydroxynaphthacenes. McCormick J.R.D. & Jensen E.R. 1962 US Patent 3,019,260.
- 2. The total synthesis of 6-demethyl-6-deoxytetracycline. Conover L.H. et al. J. Am. Chem. Soc. 1962, 84, 3222.

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