

Sulbactam sodium

PRODUCT DATA SHEET

Code No.: BIA-S1565

Pack sizes: 5 mg, 25 mg

Synonyms : Penicillanic acid 1,1-dioxide sodium

Specifications

CAS # : 68373-14-8 Molecular Formula : $C_8H_{10}NNaO_5S$

Molecular Weight : 255.2

Source : Semi-synthetic

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Sulbactam sodium is a semi-synthetic penem antibiotic formed by the oxidation of penicillanic acid to its sulfone and was invented by Barth at Pfizer in 1978. Sulbactam sodium is a weak antibiotic but its action as an irreversible inhibitor of β -lactamase is exploited to block the degradation of other penicillin derivatives. Sulbactam acts as a synergist with cephalosporins and penicillins against Gram positive bacteria and is used commercially in combination with ampicillin.

References

- 1. Penicillanic acid 1,1-dioxides as beta-lactamase inhibitors. Barth W.E. US Patent 41,234,579 1980.
- 2. CP-45,899 in combination with penicillin or ampicillin against penicillin-resistant Staphylococcus, Haemophilus influenzae, and Bacteroides. Retsema J.A. et al., Antimicrob. Agents Chemother. 1980, 17, 615.
- 3. Sulbactam/Ampicillin. A review of its antibacterial activity, pharmacokinetic properties and therapeutic use. Campoli-Richards D.M. and Brogden R.N. Drugs 1987, 33, 577.

Updated: 24 May 2019 © Copyright BioAustralis 2019