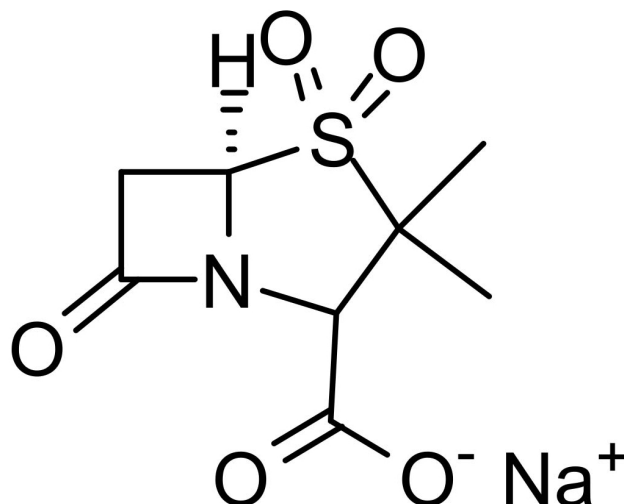


## Sulbactam sodium

Code No.: BIA-S1565

Pack sizes.: 5mg, 25mg



### Synonyms:

Penicillanic acid 1,1-dioxide sodium

## Specifications

CAS #	: <b>68373-14-8</b>
Molecular Formula	: <b>C<sub>8</sub>H<sub>10</sub>NNaO<sub>5</sub>S</b>
Molecular Weight	: <b>255.2</b>
Source	: -
Appearance	: <b>White solid</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO.</b>

## 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  $\beta$ -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.