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## Product Information

### Cefsulodin sodium salt hydrate

Product Number **C 8145**

Storage Temperature 2-8 °C

#### Product Description

Molecular Formula:  $C_{22}H_{19}N_4O_8S_2Na$  (anhydrous)

Molecular Weight: 554.5

CAS Number: 52152-93-9

Cefsulodin is a third-generation cephalosporin antibiotic that has very specific activity against *Pseudomonas aeruginosa*. It has no significant activity against other Gram-negative bacteria and very limited activity against Gram-positive bacteria and anaerobic bacteria.<sup>1,2</sup>

Penicillin-binding protein 3 (PBP3) has been proposed as the principal target for cefsulodin in *Pseudomonas aeruginosa*.<sup>3</sup> Cefsulodin has also been found to limit the adherence of *Pseudomonas aeruginosa* and *Pseudomonas fluorescens* to human fibronectin.<sup>4</sup>

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Preparation Instructions

This product is soluble in water (50 mg/ml), yielding a clear, colorless to yellow-green solution.

#### References

1. Martindale The Extra Pharmacopoeia, 31st ed., Reynolds, J. E. F., ed., Royal Pharmaceutical Society (London, England: 1996), p. 194.
2. Wright, D. B., Cefsulodin. Drug Intell. Clin. Pharm., **20(11)**, 845-849 (1986).
3. Gotoh, N., et al., Resistance of *Pseudomonas Aeruginosa* to Cefsulodin: Modification of Penicillin-binding Protein 3 and Mapping of Its Chromosomal Gene. J. Antimicrob. Chemother., **25(4)**, 513-23 (1990).
4. Di Martino, P., Effects of Antibiotics on Adherence of *Pseudomonas aeruginosa* and *Pseudomonas fluorescens* to Human Fibronectin. Chemotherapy, **47(5)**, 344-349 (2001).

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