

PRODUCT INFORMATION



Cefoperazone (sodium salt)

Item No. 16113

CAS Registry No.: 62893-20-3

Formal Name: (6R,7R)-7-[[[(2R)-2-[[[4-ethyl-2,3-dioxo-1-piperazinyl]carbonyl]amino]-2-(4-hydroxyphenyl)acetyl]amino]-3-[[[1-methyl-1H-tetrazol-5-yl]thio]methyl]-8-oxo-5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, monosodium salt

Synonyms: Cefoneg, Cefosint, CP 52,640-2, Perocef

MF: $C_{25}H_{26}N_9O_8S_2 \cdot Na$

FW: 667.7

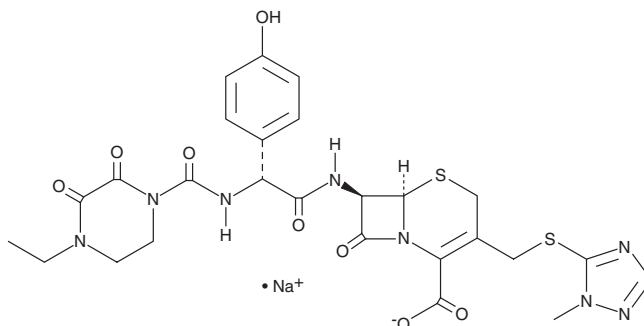
Purity: $\geq 95\%$

UV/Vis.: λ_{max} : 229, 268 nm

Supplied as: A crystalline solid

Storage: $-20^\circ C$

Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cefoperazone (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the cefoperazone (sodium salt) in the solvent of choice, which should be purged with an inert gas. Cefoperazone (sodium salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of cefoperazone (sodium salt) in these solvents is approximately 20 and 15 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of cefoperazone (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of cefoperazone (sodium salt) in PBS (pH 7.2) is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Cefoperazone is a cephalosporin antibiotic that is active *in vitro* against most Gram-positive and Gram-negative bacteria, including β -lactamase strains (3-4 $\mu g/ml$ inhibits 90% of *S. aureus* growth).¹ It has been studied in the treatment of upper and lower respiratory tract infections, urinary tract infections, gynecological infections, skin infections, as well as bacteremia.¹

Reference

1. Neu, H.C. The *in vitro* activity, human pharmacology, and clinical effectiveness of new β -lactam antibiotics. *Annu. Rev. Pharmacol. Toxicol.* **22**, 599-642 (1982).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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