

Cefoperazone Sodium Cas No. : 62893-19-0

Cephalosporin: any of a group of broad-spectrum derived from species of fungi of the genus Cephalosporium and are related to the penicillins in both structure and mode of action but relatively penicillinase-resistant antibiotics.

Active Pharmaceuticals Ingredients Manufacturers

Taj Pharmaceuticals Ltd.

Cefoperazone Sodium

CAS No. : 62893-19-0

CAS NO. 62893-19-0 (Base)
62893-20-3 (Sodium)CEFOPERAZONE SODIUM
EINECS NO. 263-749-4(Base)
62893-19-0 (Sodium)
FORMULA C₂₅H₂₇N₉O₈S₂·Na
MOL WT. 667.65

CLASSIFICATION

ANTIBIOTICS / CEPHALOSPORINS /

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE White to slightly yellowish crystalline powder

MELTING POINT

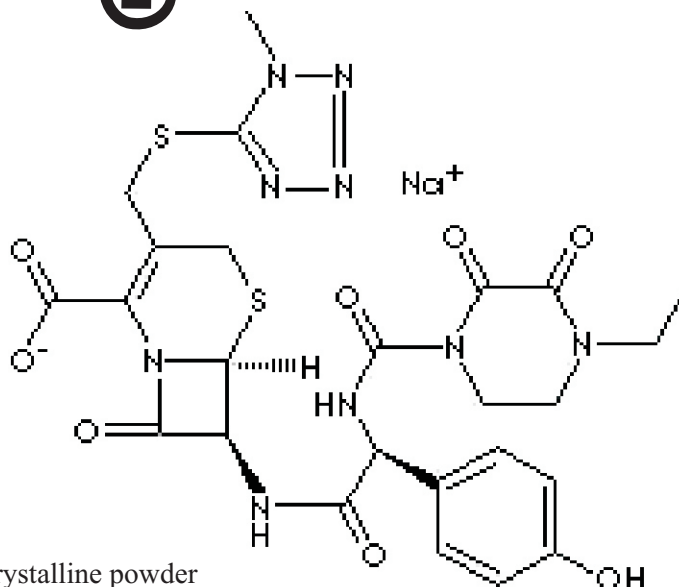
BOILING POINT

SPECIFIC GRAVITY

SOLUBILITY IN WATER Freely soluble (practically insoluble in ether)

pH 4.5 - 6.5

STABILITY Stable under ordinary conditions.



GENERAL DESCRIPTION & APPLICATIONS

Cephalosporin: any of a group of broad-spectrum derived from species of fungi of the genus Cephalosporium and are related to the penicillins in both structure and mode of action but relatively penicillinase-resistant antibiotics. These antibiotics have low toxicity for the host, considering their broad antibacterial spectrum. They have the active nucleus of beta-lactam ring which results in a variety of antibacterial and pharmacologic characteristics when modified mainly by substitution at 3 and 7 positions. Their antibacterial activities result from the inhibition of mucopeptide synthesis in the cell wall.

They are widely used to treat gonorrhea, meningitis, pneumococcal, staphylococcal and streptococcal infections. The cephalosporin class of antibiotics is usually divided into generations by their antimicrobial properties. Three generations of cephalosporins are recognized and the fourth has been grouped.

Each newer generation of cephalosporins has broader range of activity against gram-negative organisms but a narrower range of activity against gram-positive organisms than the preceding generation. The newer agents have much longer half-lives resulting in the decrease of dosing frequency. Accordingly, the third-generation cephalosporins can penetrate into tissues well, and thus antibiotic levels are good in various body fluids. Second-generation cephalosporins have broader spectrums of activity against gram negative coverage but less active against gram-positive organisms than first-generation agents. T

Cefoperazone sodium is a semi-synthetic 3rd generation cephalosporin effective against a wide range of aerobic and anaerobic gram-positive and gram-negative bacteria. It is a white to pale yellow crystalline powder; soluble in water, methanol; slightly soluble in dehydrated alcohol; insoluble in acetone, ethyl acetate, ether. Chemical designation is [6R-[6a,7b(R')]]-7-[[[(4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl] amino](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.



Taj Pharmaceuticals Ltd.
Cefotetan Sodium

CAS No. 74356-00-6

Chemistry - A third generation cephalosporin, cefoperazone sodium contains a piperazine side chain giving it antipseudomonal activity. It occurs as white, crystalline powder and is freely soluble in water and poorly soluble in alcohol. At room temperature, cefoperazone sodium has a maximum solubility in compatible IV solutions of 475 mg/ml (at concentrations >333 mg/ml vigorous and prolonged shaking may be required). Reconstituted solutions of the drug have a pH from 4.5 - 6.5. One gram contains 1.5 mEq of sodium.

Storage/Stability/Compatibility - The sterile powder for injection should be stored at temperatures less than 25°C and protected from light. Once reconstituted, solutions do not need to be protected from light.

Uses/Indications - Cefoperazone is used to treat serious infections, particularly against susceptible Enterobacteriaceae not susceptible to other less expensive agents or when aminoglycosides are not indicated (due to their potential toxicity).

Adverse Effects/Warnings - Cefoperazone is a relatively safe agent. Rarely, hypersensitivity reactions could potentially occur in animals. Because of its thiomethyltetrazole side-chain it may also rarely cause hypoprothrombinemia. Diarrhea secondary to changes in gut flora have been reported.

Note /Government Notification: These chemicals are designated as those that are used in the manufacture of the controlled substances and are important to the manufacture of the substances. For any (Control Substance) products Import and Export *** subjected to your country government laws /control substance ACT.

Information: The information on this web page is provided to help you to work safely, but it is intended to be an overview of hazards, not a replacement for a full Material Safety Data Sheet (MSDS). MSDS forms can be downloaded from the web sites of many chemical suppliers. Also that the information on the PTCL Safety web site, where this page was hosted, has been copied onto many other sites, often without permission. If you have any doubts about the veracity of the information that you are viewing, or have any queries, please check the URL that your web browser displays for this page. If the URL begins "www.tajapi.com/www/Denatonium Benzoate.htm/" the page is maintained by the Safety Officer in Physical Chemistry at Oxford University. If not, this page is a copy made by some other person and we have no responsibility for it.

The Controlled Substances Act (CSA) was enacted into law by the Congress of the United States as Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970.[1] The CSA is the federal U.S. drug policy under which the manufacture, importation, possession, use and distribution of certain substances is regulated. The Act also served as the national implementing legislation for the Single Convention on Narcotic Drugs

This document plus the full buyer/ prescribing information, prepared for health professionals can be found at:

<http://www.tajapi.com>

or by contacting the sponsor, Taj Pharmaceuticals Limited., at:
91 022 30601000.

This leaflet was prepared by
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