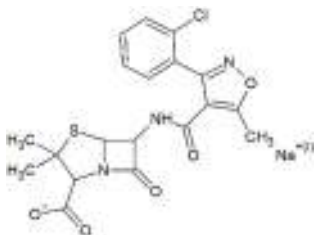


# Cloxacillin sodium

**ALTERNATE NAME:** Sodium cloxacillin  
(2S,5R,6R)-6-[[[3-(2-chlorophenyl)-5-methyl-4-isoxazolyl]carbonyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, monosodium salt

**CATALOG #:** B2687-50 50 mg  
B2687-250 250 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>19</sub>H<sub>17</sub>ClN<sub>3</sub>O<sub>5</sub>S • Na

**MOLECULAR WEIGHT:** 457.9

**CAS NUMBER:** 642-78-4

**APPEARANCE:** White to off-white solid

**PURITY:** ≥95%

**SOLUBILITY:** ~15 mg/ml DMSO

**DESCRIPTION:** Cloxacillin sodium is a β-lactam antibiotic of penicillin subclass, which inhibits bacterial cell wall synthesis by targeting the proteoglycan synthesis. Cloxacillin has a narrow spectrum of action and is effective against Gram-positive organisms. Cloxacillin binds to *S. aureus* penicillin-binding protein 1 (PBP1), PBP2, PBP3, and PBP4 (IC<sub>50</sub>s = 0.04, 0.12, 0.21, and 2.5 μg/ml, respectively). Cloxacillin is resistant to the action of β-lactamase and therefore preferentially used for treatment of Staphylococcal infections.

**STORAGE TEMPERATURE:** -20°C. Protect from moisture

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**RELATED PRODUCTS:**

Rifampicin (B1511)  
Streptomycin Sulfate (2517)  
Clindamycin hydrochloride (2627)  
Oxytetracycline Hydrochloride (B1527)  
Chloramphenicol, USP Grade (2486)

**DISCLAIMER:** *FOR RESEARCH USE ONLY! Not to be used on humans.*