



# Flomoxef Sodium PRODUCT DATA SHEET

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<b>Product Name:</b>	Flomoxef Sodium
<b>Product Number:</b>	F041
<b>CAS Number:</b>	92823-03-5
<b>Molecular Formula:</b>	$C_{15}H_{18}F_2N_6NaO_7S_2$
<b>Molecular Weight:</b>	519.451
<b>Form:</b>	powder
<b>Appearance:</b>	white or off-white powder
<b>Source:</b>	synthetic
<b>Description:</b>	Flomoxef Sodium is a $\beta$ -lactam inhibitor and member of the oxacephem family and exhibits antibiotic properties. It has been used for respiratory infections and bone diseases (ie osteoporosis). It was synthesized in 1982 by Shionogi & Co, Osaka, Japan in order to overcome disulfiram actions.
<b>Mechanism of Action:</b>	Flomoxef Sodium is a $\beta$ -lactam inhibitor that acts by inhibiting cell-wall synthesis. This is performed by binding to penicillin-binding proteins which prevents the transpeptidation step of peptidoglycan synthesis in bacterial cell walls, leading to the inhibition of cell-wall biosynthesis.
<b>Spectrum:</b>	Flomoxef Sodium is effective for Gram-negative and Gram-positive bacteria including MRSA. It is also effective for <i>Nocardia</i> .
<b>Microbiology Applications</b>	Flomoxef is commonly used in clinical <i>in vitro</i> microbiological antimicrobial susceptibility tests (panels, discs, and MIC strips) against Gram-positive and Gram-negative microbial isolates. Medical microbiologists use AST results to recommend antibiotic treatment options. Representative MIC values include: <ul style="list-style-type: none"><li>◦ <i>B. fragilis</i> 0.5 <math>\mu</math>g/mL – <math>\geq</math> 128 <math>\mu</math>g/mL</li><li>◦ <i>MRSA</i> 4 <math>\mu</math>g/mL - <math>\geq</math> 16 <math>\mu</math>g/mL</li></ul>

For a representative list of Flomoxef MIC values, [click here](#).

**References:**

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