Enrofloxacin

PRODUCT DATA SHEET
issue date 07/31/2019

Product Name: Enrofloxacin
Product Number: E016
CAS Number: 93106-60-6
Molecular Formula: C₁₉H₂₂FN₃O₃
Molecular Weight: 359.39
Form: Powder
Appearance: Light yellow or yellow-orange powder
Solubility: Water: Slightly soluble
Source: Synthetic
Melting Point: 221-226°C
Storage Conditions: 2-8°C

Description: Enrofloxacin is a fluoroquinolone antibiotic commonly used in veterinary medicine.

TOKU-E offers two forms of enrofloxacin, enrofloxacin (E016) and enrofloxacin HCl (E007). Enrofloxacin is slightly soluble in aqueous solution and enrofloxacin HCl is freely soluble at 10 mg/mL.

Mechanism of Action: Fluoroquinolone antibiotics target bacterial DNA gyrase, an enzyme which reduces DNA strain during replication. Because DNA gyrase is required during DNA replication, subsequent DNA synthesis and ultimately cell division is inhibited.

Spectrum: Enrofloxacin is a broad spectrum antibiotic targeting a wide variety of gram positive and gram negative bacteria and a few Mycoplasma species.

Microbiology Applications: Enrofloxacin is commonly used in clinical in vitro microbiological antimicrobial susceptibility tests (panels, discs, and MIC strips) against gram positive, gram negative, and certain Mycoplasma species. Medical microbiologists use AST results to recommend antibiotic treatment options for infected patients. Representative MIC values include:

- Pseudomonas aeruginosa 0.5 µg/mL – 2 µg/mL
- Escherichia coli 0.004 µg/mL – 0.03 µg/mL
- For a complete list of enrofloxacin MIC values, click here.
