ENROFLOXACIN HYDROCHLORIDE
SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Enrofloxacin hydrochloride
Product Number: E007
Distributor Name: TOKU-E Company
Distributor Address: 715 W Orchard Dr, Suite 3
                    Bellingham, WA 98225
Phone Number: (360) 734-1789
Emergency Phone Number (US only): 1 (800) 535-5053
Emergency Phone Number (International): +1 (352) 323-3500
Safety Data Sheet Issued by: TOKU-E USA
CAS-Number: [112732-17-9]
Recommended Use: Broad spectrum antibiotic targeting a wide variety of gram positive and gram negative bacteria and a few Mycoplasma species
Restrictions on Use: Not for human or animal use

2. HAZARD(S) IDENTIFICATION

GHS Classification: Not classified. Toxicology information unavailable.
GHS Label Elements, Including Precautionary Statements: None
Hazard Statements: None
Precautionary Statements: None
Hazards not otherwise classified (HNOC) by GHS: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C₁₉H₂₂FD₃O₃·HCl
Molecular Weight: 395.86 g/mol
CAS-Number: [112732-17-9]
EC-Number: Not available

4. FIRST-AID MEASURES

General Advice: Consult a physician. Show this Safety Data Sheet to the medical provider
If Inhaled: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a doctor
In Case of Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes, consult a doctor

If Swallowed
Never give anything by mouth to an unconscious person. Consult a doctor. Rinse mouth with water.

5. **FIRE-FIGHTING MEASURES**
   - Conditions of Flammability
     Not flammable or combustible
   - Suitable Extinguishing Media
     Water spray, alcohol-resistant foam, dry chemical, carbon dioxide
   - Special Protective Equipment for Firefighters
     Wear self-contained breathing apparatus
   - Hazardous Combustion Products
     Formed under fire conditions: Carbon and Nitrogen oxides, Hydrogen chloride gas, Hydrogen fluoride

6. **ACCIDENTAL RELEASE MEASURES**
   - General
     Evacuate personnel to safe location
   - Personal Precautions
     Wear respiratory protection. Avoid dust formation and breathing vapors/mist/dust/gas. Ensure adequate ventilation
   - Environmental Precautions
     Prevent spillage, do not let product enter drains
   - Methods of Containment and Cleanup
     Place in suitable, closed containers for licensed disposal. Avoid dust formation

7. **HANDLING AND STORAGE**
   - Precautions for Safe Handling
     Avoid contact with skin and eyes. Provide exhaust ventilation in areas where dust if formed
   - Precautions for Safe Storage
     Keep container tightly closed and in a dry, well-ventilated place
   - Incompatibilities
     None known

8. **EXPOSURE CONTROLS/ PERSONAL PROTECTION**
   - Contains no substances with occupational exposure limit values
   - PPE: Respiratory protection
     Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
PPE: Hand Protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands.

PPE: Eye Protection
Use a face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

PPE: Skin and Body Protection
When deemed needed according to the concentration and amount of this product, use a complete body suit.

9. PHYSICAL/CHEMICAL PROPERTIES
- Appearance: Off-white or slightly yellow crystalline powder
- pH: No data available
- Melting Point/Freezing Point: No data available
- Boiling Point: 580.5°C
- Flash Point: 304.9°C
- Ignition Temperature: No data available
- Autoignition Temperature: No data available
- Lower Explosion Limit: No data available
- Upper Explosion Limit: No data available
- Vapor Pressure: No data available
- Density: No data available
- Water Solubility: 10 mg/L at 25°C
- Solubility in Other Solvents: No data available
- Partition Coefficient: n-octanol/water: No data available
- Relative vapor density: No data available
- Odor: No data available
- Odor Threshold: No data available
- Evaporation Rate: No data available

10. STABILITY AND REACTIVITY
- Chemical Stability: Stable under recommended storage conditions
- Possibility of Hazardous Reactions: No data available
- Conditions to Avoid: No data available
- Materials to Avoid: Strong oxidizing agents
- Hazardous Decomposition Products: Carbon and Nitrogen oxides, Hydrogen fluoride, and Hydrogen chloride gas formed under fire conditions

11. TOXICOLOGICAL INFORMATION
- Oral LD$_{50}$: No data available
- Inhalation LC$_{50}$: No data available
- Dermal LD$_{50}$: No data available
Intraperitoneal LD₅₀  No data available
Intraperitoneal LD₅₀  No data available
Intravenous LD₅₀  No data available
Skin Corrosion/Irritation  No data available
Serious Eye Damage/ Eye Irritation  No data available
Respiratory or Skin Sensitization  No data available
Germ Cell Mutagenicity  No data available
Carcinogenicity  No component of this product present at levels greater than or equal to 0.1% is identified as a possible or probable carcinogen by IARC, ACGIH, NTP, or OSHA
Reproductive Toxicity  No data available
Teratogenicity  No data available
Specific Target Organ Toxicity: Single Exposure (Globally Harmonized System)  No data available
Specific Target Organ Toxicity: Repeated Exposure (Globally Harmonized System)  No data available
Aspiration Hazard  No data available
Potential Health Effects  See Section 2, Hazard(s) Identification
Signs and Symptoms of Exposure  To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated
Synergistic Effects  No data available
Additional Information  RTECS: Not available

12. ECOLOGICAL INFORMATION
Toxicity  No data available
Persistence and Degradability  No data available
Bioaccumulative Potential  No data available
Mobility in Soil  No data available
PBT and vPvB Assessment  No data available
Treat as if harmful if released into environment

13. DISPOSAL CONSIDERATIONS
Product  Dispose of product through a licensed disposal company
Contaminated Packaging  Dispose of as unused product

14. TRANSPORTATION INFORMATION
DOT (US)  Not Dangerous Goods
IMDG  Not Dangerous Goods
IATA  Not Dangerous Goods

15. REGULATORY INFORMATION
OSHA Hazards  No known OSHA Hazards
SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

SARA 311/312 Hazards
No SARA Hazards

Massachusetts Right to Know Components
No components are subject to the Massachusetts Right to Know Act

Pennsylvania Right to Know Components
Enrofloxacin-D5 Hydrochloride
CAS-Number [112732-17-9]
Revision Date: Not available

New Jersey Right to Know Components
Enrofloxacin-D5 Hydrochloride
CAS-Number [112732-17-9]
Revision Date: Not available

California Prop. 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm

Canada Information
Identifier: [100986-85-4]
This substance is not specified on any list. There is no control measure imposed on this substance

EU Information
SDS in accordance with REACH 1907/2006
Not an ECHA Pre-Registered or Registered substance
See GHS Information under Section 2, Hazard Identification

16. OTHER INFORMATION
Date of last revision: 2017-04-20

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. TOKU-E Company shall not be held liable for any damage resulting from handling or from contact with the above product. Please see reverse side of invoice or packing slip for additional terms and conditions of sale.