

According to EC Regulation 1907/2006 (REACH)



PRODUCT SAFETY DATA SHEET

ENROFLOX 100

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF COMPANY / UNDERTAKING

Product Name	Enroflox 100
Supplier	Norbroke Laboratories Ltd, Station Works, Newry, Co.Down, N.Ireland, BT35 6JP.
Supplier	Norbroke, Inc. 9733 Loiret Blvd Lenexa, KS 66219 Phone: 913 599 5777 Fax: 913 599 5766

2. HAZARDS IDENTIFICATION

Physical and Chemical Hazards	:	Not classified as dangerous under EEC Directives 67/548/EEC, 88/379/EEC or 99/45/EC.
Environmental Hazards	:	None known
Adverse Human Health Effects	:	Continued exposure to Enroflox 100 may cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. Overexposure to vapour may produce dizziness, drowsiness, or nausea. May cause irritation to skin with symptoms of reddening and itching. May cause irritation to eyes with symptoms of reddening, tearing, and stinging. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Preparation	:	Preparation
Active Ingredients	:	Enrofloxacin CAS # 93106-60-6 L-Arginine Base CAS # 74-79-3 Butyl Alcohol CAS # 71-36-3 Benzyl Alcohol CAS # 100-51-6
Description	:	Injectable antimicrobial solution
Chemical Family	:	Antimicrobial- Quinoline Compound

4. FIRST AID MEASURES

Inhalation	:	Remove to fresh air. If any signs or symptoms occur or persist seek medical advice.
Skin Contact	:	Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse.
Eyes Contact	:	Immediately flush eyes with copious amounts of water for at least 15 minutes. If irritation persists, seek medical attention.
Ingestion	:	Do not induce vomiting. Seek medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Use carbon dioxide, dry chemical or alcohol-resistant foam spray extinguishers. Use water spray to cool fire-exposed containers. A fine water mist may be used to smother or to disperse vapors.
Fire and explosion hazards:	None.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	:	Provide good ventilation. Prevent skin and eye contact.
Environmental Precautions	:	Keep away from drains, surface-water, ground-water and soil.
Method for Clean-up	:	Absorb small spills on spill pillows, sand, sawdust or other suitable absorbing material.

7. HANDLING AND STORAGE

Handling	:	Avoid contact with eyes, skin or clothing. Do not breathe vapors or mist. Do not ingest. Do not smoke or eat while handling the product. Wash thoroughly after handling. The containers should be stored in their original boxes when not in use.
Storage	:	Store in closed containers in a cool, dry, well-ventilated area, below 25°C and away from oxidisers, heat, sparks and open flame. Protect from direct sunlight. Precipitation may occur due to cold temperature. To redissolve, warm and then shake the vial. Keep container closed when not in use. Do not transfer contents to unlabelled containers. Use only with adequate ventilation. Keep out of reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component - Occupational Exposure Standard

Enrofloxacin

Not Established

For pure enrofloxacin :

Acute oral toxicity:	LD50 = > 5000mg/kg (Rat)
Acute dermal toxicity:	LD50 = > 2000mg/kg (Rabbit)
Acute inhalation toxicity:	> 3547mg/kg (Rat)

Protective Equipment:	Wear vinyl, nitrile or rubber gloves, a waterproof bib-apron and suitable eye protection when applying the product.
-----------------------	---

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquid
Color	:	Pale yellow
Odour	:	Slight alcohol
pH	:	8.9 – 10.9
Boiling point	:	Not established
Melting/Freezing point:		Not established
Specific gravity	:	1.07 – 1.09
Bulk density	:	Not established
Vapour Pressure	:	Not Established
Vapour Density	:	Not Established

10. STABILITY AND REACTIVITY

Stability	:	Stable under normal temperatures and pressures.
Conditions to avoid	:	None known
Materials to avoid	:	None known
Hazardous polymerization	:	Will not occur
Decomposition products	:	Carbon monoxide, carbon dioxide, oxides of nitrogen, other potentially toxic fumes, ammonia

11. TOXICOLOGICAL INFORMATION

Exposure Effects (Acute)

Eye Contact	:	Direct contact of the solution with eyes can cause irritation.
Skin Contact	:	Prolonged or repeated contact with Enroflox 100 may cause irritation.
Inhalation	:	May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.
Ingestion	:	Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

Exposure Effects (Chronic)

Unknown for the product mixture. When this product is used according to the directions, prolonged exposure of man is not expected. Both its mutagenicity and its teratogenicity are not known.

12. ECOLOGICAL INFORMATION

Data on the ecological implications for Enroflox 100 is not yet available.

Ecological Data for Enrofloxacin:

Fish Toxicity:	150mg/L, Golden orfe (<i>Leuciscus idus</i>) 10mg/L, 96hrs. Rainbow trout (<i>Salmo gairdneri</i>) 10mg/L, 96hrs. Bluegill (<i>Lepomis macrochirus</i>)
Invertebrate Toxicity:	100mg/L, 24hrs. Water flea (<i>Daphnia magna</i>)

13. DISPOSAL CONSIDERATIONS

Product/Residues	:	Do not discharge the product material into surface or waste water. For disposal, use an incinerator licensed for chemical waste.
Package	:	Dispose of waste containers using regular disposal methods in accordance with local and national environmental regulations.

14. TRANSPORT INFORMATION

Land, Sea & Air Transport

ADR/RID, IMO/IMDG, IATA/ICAO, UN No. : Not applicable

15. REGULATORY INFORMATION

Labelling Information	:	None
Safety phrases	:	S2 Keep out of reach of children
	:	S7 Keep container tightly closed

16. OTHER INFORMATION

NADA : 141-068 For Animal Treatment Only
ML : 2000/01

Revision Date : 15/03/13
Revision No : 01
Printing Date : 21/03/2013

Suppliers data sheets and various chemicals and pharmaceuticals databases were used to compile this sheet.

The information contained in this PSDS is believed to be accurate and represents the best information available at the time of preparation. However Norbrook Laboratories Limited makes no warranty, express or implied, with respect to such information and assumes no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes, and Norbrook Laboratories Limited will not be held liable for any damage resulting from the handling of or contact with the above product.