



## PRODUCT SAFETY DATA SHEET

### NOROMECTIN PLUS INJECTION

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

Product Name	Noromectin Plus Injection (USA)
Supplier	Norbrook Laboratories Ltd, Station Works, Newry, Co.Down, N.Ireland, BT35 6JP.
Supplier	Norbrook, Inc. 9733 Loiret Blvd Lenexa, KS 66219 Phone: 913 599 5777 Fax: 913 599 5766

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Preparation	:	Preparation
Active Ingredients	:	22, 23-Dihydroavermectin B <sub>1</sub> ( Ivermectin ) Clorsulon
Description	:	Anthelmintic Endectocide ( Chemical Group 3-AV )
Chemical Family	:	Avermectins / Benzenesulfonamides

#### 3. 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	:	Ivermectin is harmful to aquatic life. Surface waters or ditches should not be contaminated with product or used containers.
Adverse Human Health Effects	:	None known

#### 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 vapours.
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 and clothing. Do not breathe vapours 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 away from oxidisers, heat, sparks and open flame. Protect containers from physical damage and light.  Keep container closed when not in use. Before opening large containers, release any pressure build-up by loosening closure slowly. Do not transfer contents to unlabelled containers. Do not store in aluminium containers. Use only with adequate ventilation. Keep out of reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component - Occupational Exposure Standard

Ivermectin	Not Established
Clorsulon	Not Established

### For pure ivermectin :

LD50 ( Oral, mouse )	25 mg/kg
LD50 ( Oral, rat )	50 mg/kg
LD50 ( Dermal, rat )	> 660 mg/kg

### For pure clorsulon :

LD50 ( Oral, mouse )	>10000 mg/kg
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Protective Equipment :	Wear vinyl, nitrile or rubber gloves, a waterproof bib-apron and suitable eye protection when applying the product.
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form :	Liquid
Colour :	Clear, pale yellow to yellow
Odour :	None

## 10. STABILITY AND REACTIVITY

Stability	:	Stable under normal conditions of storage and use.
Conditions to avoid	:	None known
Materials to avoid	:	Polyethylene glycol is incompatible with some colours. Strong acids and strong oxidising agents may evolve formaldehyde from the glycerol formal component.

## 11. TOXICOLOGICAL INFORMATION

### Exposure Effects ( Acute )

Eye Contact	:	Direct contact of the solution with eyes can cause irritation.
Skin Contact	:	Ivermectin is non-irritating in animal studies. Prolonged or repeated contact with Noromectin Plus may cause irritation and/or drying and cracking of the skin.
Inhalation	:	None known.
Ingestion	:	Oral toxicity of the Noromectin Plus solution is low. Pure ivermectin is considered highly toxic in acute animal studies.  If overexposed to ivermectin, symptoms may include decreased activity, slow rate of breathing, dilation of the pupils, muscle tremors and inco-ordination.

### Exposure Effects ( Chronic )

Unknown for the product mixture. When this product is used according to the directions, prolonged exposure of man is not expected. Ivermectin has tested negative in several mutagenicity studies.

## 12. ECOLOGICAL INFORMATION

Data on the ecological implications for Noromectin Plus Injection is not yet available.

## 13. DISPOSAL CONSIDERATIONS

Product/Residues	:	Ivermectin is extremely dangerous to aquatic life. Do not discharge the 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 No., IMO/IMDG code, IATA/ICAO Class UN No. : Not applicable

## 15. REGULATORY INFORMATION

### Labelling Information

Safety Phrases	:	S2	Keep out of reach of children
		S7	Keep container tightly closed

## 16. OTHER INFORMATION

ML : 2000/01

For Animal Treatment Only.

ANADA 200-436, approved by FDA

Revision Date : 20/03/07  
Revision No : 01  
Printing Date : 23/03/2007

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

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