



PRODUCT SAFETY DATA SHEET

NOROMECTIN POUR-ON (USA)

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

Product Name	Noromectin Pour-On (USA)
Manufacturer	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

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

<i>Hazardous Ingredients</i>	<i>% Wt.</i>	<i>CAS No.</i>	<i>EC No.</i>	<i>Symbol</i>	<i>Risk Phrases</i>
Ivermectin	0.5	69-52-3	200-708-1	Xn	42/43
Isopropanol	>60	67-63-0	200-661-7	F, Xi	11, 36, 67

3. HAZARDS IDENTIFICATION

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Physicochemical	:	Highly flammable
Human Health	:	Irritating to eyes. Vapour may cause drowsiness and dizziness.
Environmental	:	Ivermectin is harmful to aquatic life. Surface waters or ditches should not be contaminated with product or used containers.

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.

Special fire-fighting procedure : Do not use a solid stream of water since the steam will scatter and spread the fire.

Fire and explosion hazards : Isopropyl alcohol, as a constituent, will not burn or ignite under normal usage but is a dangerous fire hazard and a moderate explosion hazard when exposed to heat, flames or oxidisers. Vapours are heavier than air and may travel a considerable distance to an ignition source and flashback.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions : Eliminate all ignition sources. 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.

If stored at temperatures below 0°C, Noromectin Pour-On may appear cloudy. Allowing to warm at room temperature will restore the normal appearance without affecting efficacy.

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
Isopropyl Alcohol	OES (8hr TWA)	400 ppm (999 mg/m ³)
	STEL (15-min)	500 ppm (1250 mg/m ³)

For pure ivermectin :

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

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
Colour : Clear, colourless
Odour : Characteristic smell of isopropyl alcohol. Do not test for odour.
Specific Gravity : 0.784 (IPA)
Vapour Pressure : 33 mm Hg @ 20°C (IPA)
Vapour Density : 20 (IPA)
Volatile components : 80 % ^W/_W
Flash Point : 14°C

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions of storage and use.
Conditions to avoid : None known
Materials to avoid : Isopropyl alcohol is incompatible with acetaldehyde, chlorine, ethylene oxide, hypochlorous acid, isocyanates, phosgene, oleum, perchloric acid and strong oxidising agents.

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 Pour-On may cause irritation and/or drying and cracking of the skin.
Inhalation : Vapours of isopropyl alcohol may cause mild irritation of the nose and throat. Prolonged exposures to isopropyl alcohol above the OES may cause nausea, headache and mild narcosis.
Ingestion : Oral toxicity of the Noromectin Pour-On 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 in-coordination.
Ingesting a large amount of isopropyl alcohol will cause burning of the gastrointestinal tract, nausea, vomiting and CNS depression.

Exposure Effects (Chronic)

Unknown for the product solution. 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 Pour-On 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 Transport, Sea Transport, Air Transport

ADR / RID IMO / IMDG IATA / ICAO

UN Number	:	1219
Proper Shipping Name	:	Isopropanol (Isopropyl Alcohol)
Class	:	3
Packing Group	:	II
Hazchem Code	:	2(Y)E

15. REGULATORY INFORMATION

Labelling Information



Risk phrases	:	R11 Highly flammable R36 R67 R42/43
Safety Phrases	:	S2 Keep out of reach of children S7 Keep container tightly closed S16 Keep away from sources of ignition - No Smoking

16. OTHER INFORMATION

ANADA 200-272, approved by FDA

For Animal Treatment Only.

Contains 5mg ivermectin/ml

Revision Date	:	02/02/07
Revision No	:	04
Printing Date	:	06/07/2007

Risk Phrases

R11 : Highly flammable

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

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