



Section 1 – Identification of the substance/preparation and the company

Product Name: Moxam Sheep
Manufacturer: Donaghys Ltd.
Address: 16 Sheffield Crescent
PO Box 20 449
Christchurch
Telephone Number: 0800 942 006
Recommended Use: For the treatment of gastrointestinal and pulmonary nematodes and itch mite of sheep. Donaghys MOXAM Sheep contains moxidectin, a member of the milbemycin / avermectin family of anthelmintics. It is effective against sensitive strains of gastrointestinal roundworms, lungworm and itch mite

Section 2 – Hazard Identification

Hazard Classes



6.5B May cause an allergic skin reaction
6.8B Suspected of damaging fertility or the unborn child
6.8C May cause harm to breast fed children
9.1A Very toxic to aquatic life with long lasting effects
9.2C Harmful to the soil environment
9.4C Harmful to terrestrial invertebrates

Prevention statements

P102 Keep out of reach of children
P103 Read label before use
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P260 Do not breathe mist/vapours/spray
P261 Avoid breathing mist/vapours/spray
P263 Avoid contact during pregnancy/while nursing
P264 Wash hands thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P272 Contaminated work clothing should not be allowed out of the workplace
P273 Avoid release to the environment
P280 Wear protective gloves/clothing

EPA NZ Approval Code HSR100758

Signal word WARNING

IN CASE OF EMERGENCY PHONE
National Poisons Centre 03-474-4700 or 0800 POISON (0800-764-766)



Section 3 – Composition Information

Chemical Entity	CAS No.	Content
Moxidectin	113507-06-5	2mg/ml
Butylated Hydroxytoluene	128-37-0	<0.3% w/w
Benzyl Alcohol	100-51-6	<0.3% w/w
Other Non hazardous ingredients	N/A	Remaining %

Section 4 – First Aid Measures

If Swallowed:	Call the POISON CENTER or contact a doctor/physician if you feel unwell. Rinse Mouth.
If in eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If on skin:	Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before use.
If inhaled:	Remove to fresh air and keep at rest in a position comfortable for breathing. Call the POISON CENTRE or doctor/physician if you feel unwell.

If exposed or if you feel unwell: Call the POISON CENTER or contact a doctor/physician. If medical advice is needed, have product container or label at hand.

POISON CENTRE CONTACT: 0800 764 766 (National Poisons Information Centre)

Section 5 – Fire-fighting Measures

Flammability:	Non-flammable
Suitable Extinguishing Media:	Use water spray foam, carbon dioxide and dry powder appropriate for the surrounding area. Equipment should be thoroughly decontaminated after use.
Fire and Explosion Hazards:	Not applicable.
Hazardous combustion products:	Non combustible. Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Fire decomposition products from this product are likely to be irritating if inhaled. Carbon dioxide and if combustion is incomplete, carbon monoxide and smoke; nitrogen and its compounds, and under some circumstances, oxides of nitrogen; occasionally hydrogen cyanide gas in reducing atmospheres and water.

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Protective Equipment: Fire fighters should wear self contained breathing apparatus and protective clothing in accordance to normal fire-fighting procedures.

Section 6 – Accidental Release Measures

Emergency Procedures: None applicable.

Spills and Disposal: For minor spills, refer to product label for specific instructions. In the event of a major spill, prevent spillage from entering drains or water courses. Stop leak if safe to do so, and contain spill by absorbent material such as sand or vermiculite. Sweep up and shovel into labelled containers and dispose of waste in compliance with local disposal regulations.

Protective Equipment: Ventilating area and wash spill site after material pick-up is complete, ensuring no run offs enter drains. Wear protective gloves and face/eye protection and protective clothing. If there is significant chance that vapours in an area can build up, then use a respirator.

Environmental Precautions: Prevent washings from entering waterways. Do NOT flush into surface water or sanitary sewer system.

Section 7– Handling and Storage

Safe handling advice: Avoid eye and skin contact. Do not smoke, eat or drink while handling or using the product. Observe good personal hygiene by washing hands before and after use. Wear eye protection when handling. Containers should always be kept closed and stored in original labelled container. Keep out of reach of children. Avoid contact during pregnancy or when nursing.

Storage conditions: Store below 25°C and protect from sunlight. Do not freeze. Store original container that is clearly labelled and free from leaks. Avoid contamination of water, foodstuffs, feed or seed. No special ventilation is recommended under normal conditions of storage and use.

Incompatible Materials: No information available.

Section 8 – Exposure Controls/Personal Protection

Exposure Limits: N/A
The ADI for Moxidectin is set at 0.01 mg/kg/day. The corresponding NOEL is set at 1mg/kg/day. Values taken from Australian ADI list, Dec 2006



Ventilation:	Natural ventilation should be adequate under normal operating conditions. Local exhaust should be used when large amounts are released. If the air concentration of vapour or mist is high, the process should be modified to reduce the concentration.
Eye Protection:	Eye protection such as protective glasses or goggles is recommended when this product is being used.
Skin protection:	Avoid contact with skin. Wear elbow-length gloves when skin contact is likely, wash hands or other exposed areas after handling and use.
Respirator:	No special respiratory protection equipment is recommended under normal conditions of use with sufficient ventilation.
Thermal Hazards:	Non flammable product. No special protective equipment is recommended.

Section 9 – Physical and Chemical Properties

Appearance:	A clear, pale yellow liquid
Specific Gravity:	1.03 – 1.07
pH:	6.0 – 7.0
Odour:	Aromatic odour
Solubility:	Soluble in water

Section 10 – Stability and Reactivity

Stability:	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to Avoid:	Contact with incompatible materials
Incompatible materials:	Strong acids, Strong bases
Hazardous reactions:	Polymerization will not occur

Section 11 – Toxicological Information

Acute Toxicity:	Ingestion: Significant oral exposure is considered to be unlikely. Available data shows that this product may cause gastric upset but further symptoms are not available. This product may be irritating to the mucous membranes but is unlikely to cause anything more than transient discomfort.
	Ocular: This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.



Dermal:

Available data indicates that this product is not harmful. It should present no hazards in normal use. However, product may be irritating, but it is unlikely to cause anything more than mild transient discomfort.

Inhalation:

Available data indicates that this product is not harmful. However, this product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort. Fire decomposition product, carbon monoxide poisoning can produce headaches, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgement and unconsciousness.

Chronic Toxicity:

Repeated exposure may cause allergic disorders and exposure by all routes should be minimized.

Animal toxicological data for Moxidectin:

LD₅₀ (Oral), Rat 106 mg/kg

LD₅₀ (Oral), Mouse 42-84 mg/kg

In rats given oral doses of moxidectin, decreased activity, prostration, tremors, chromodacryorrhea, decreased respiration, diarrhoea, hypersensitivity to touch and sound and epistaxis occurred. Congestion of the liver, kidneys and lungs were observed in animals that died, but animals which were sacrificed at the end of the 14 day observation period showed no abnormalities. No overt signs of toxicity were noted in rabbits treated dermally with moxidectin.

Section 12 - Ecological Information

Ecotoxicity:

This product is very toxic to aquatic organisms. Moxidectin is inactive against a wide variety of plants.

Aquatic organisms

Bluegill 96-hour LC₅₀ 0.62ppb, NOEC<0.52ppb

Rainbow Trout 96-hour LC₅₀ 16ppb, NOEC<0.15ppb

Water Flea 48-hour EC₅₀ 0.03ppb, NOEC 0.011ppb

Green Algae 72-hour EC₅₀ >87ppb

Avian species

Mallard duck: 21-day acute oral LD₅₀ 365mg/kg

Chicken: 14-day acute oral LD₅₀ 283 mg/kg

Bobwhite quail: : 21-day acute oral LD₅₀ (Oral), Rat 278mg/kg

Earthworm: LC₅₀ (28day) 37.2mg/kg

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in soil:

No data available.

Other adverse effects:

No data available.

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Section 13 – Disposal Considerations

Product and container Disposal: If possible, dispose of by using product according to the label, otherwise dispose of product, packaging and waste at an approved landfill or equivalent facility in accordance with local, regional and national environmental regulations. Prevent washings from entering waterways. Do NOT flush into surface water or sanitary sewer system

Section 14 – Transport Information

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Moxidectin)
UN Number	3082
Hazard class a& subsidiary risk	9
Packing Group	III
Marine pollutant	YES
Hazchem code	3Z
Other	Keep separated from food stuff

Section 15 – Regulatory Information

EPA NZ Registration Code: HSR100758
ACVM Registration Number: A010378

Section 16 – Other Information

The information in this MSDS is provided in good faith, but no warranty, expressed or implied is made. Contact Donaghys Ltd for more information.

EMERGENCY CONTACT No.: 0800 764 766 (National Poisons Information Centre)