

**MECTEC PLUS**  
(IVERMECTIN PLUS CLORSULON)

**CAUTION**  
KEEP OUT OF REACH OF CHILDREN  
READ SAFETY DIRECTIONS  
FOR ANIMAL TREATMENT ONLY



**MECTEC PLUS**  
(IVERMECTIN PLUS CLORSULON)



**ACTIVE CONSTITUENTS:**  
100 mg/mL CLORSULON, 10 mg/mL IVERMECTIN

For the treatment and control of ivermectin and clorsulon sensitive strains of internal and external parasites of cattle, including adult liver flukes.

<b>CONTENTS</b> <b>500</b> ML	<b>★★★★★</b> <b>iO</b> GUARANTEE	<b>PROUDLY OWNED &amp; MADE</b>
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**NOTES TO USERS**  
Transitory discomfort has been observed in some cattle following subcutaneous administration. Soft tissue swelling at the injection site has also been observed. These reactions have disappeared without treatment. Divide doses greater than 10 mL between two injection sites to reduce occasional discomfort or site reaction. Different injection sites should be used for other parenteral products. When the temperature of the product is below 5°C, difficulty in administration may be encountered due to increased viscosity. Warming the product and injection equipment to about 15°C will greatly increase the ease with which the product can be injected.

**CAUTION: AVOID CARCASE DAMAGE**

1. Sterilise all injection apparatus by boiling before use. Plastic disposable syringes should not be boiled. Avoid use of strong disinfectants on apparatus.
2. Maintain cleanliness at all times.
3. Keep needles sharp and clean. Replace frequently.
4. Use shortest needle possible, certainly not exceeding 15 mm.
5. Avoid injection of animals during wet weather or under dusty conditions.
6. The product should be injected only under the skin.
7. If possible, inject high on the neck, behind the ear. Injection should be made only under loose skin in an area away from the more valuable carcass muscle. Loose skin on the neck in front of the shoulder is also a suitable area.

**USING IO MECTEC PLUS INJECTION FOR BEST RESULTS**  
Treatments with IO MECTEC PLUS INJECTION generally should be timed to use its antiparasitic properties to prevent development or build-up of parasitic infections. Resistance may develop to any drench. For detailed advice on a program of parasite control you should consult your veterinarian.

**STERILE DRAW OFF ASSEMBLY**  
Instructions for use with automatic injection equipment:

- Use sterile equipment
- Connect open end of tube firmly to injector
- Remove cap from bottle and disinfect rubber stopper. Hold bottle upright. Remove protective cap and fully insert draw-off needle into centre of rubber stopper. Secure screw on cap of draw-off assembly firmly to the bottle.
- Gently prime the injector to expel any air. Equipment is now ready for use.
- After use, remove draw-off assembly from pack and flush entire apparatus with water before storing.
- Replace cap.
- If the connecting tube is used again, it should also be boiled for 15-20 minutes before use along with the injecting syringe and needles.

**PRODUCT ADVANTAGES**  
**Low-volume injection**  
The low-volume dosage level of IO MECTEC PLUS INJECTION makes it convenient for use with most syringes or automatic injectors. IO MECTEC PLUS INJECTION reduces the need for separate drenching, dipping and spraying operations common in the past, to control liver fluke and certain external parasites.

**Broad Spectrum**  
IO MECTEC PLUS INJECTION provides broad-spectrum efficacy against roundworms, adult liver flukes, lungworm, eyeworm, sucking lice, mites and cattle tick.

**Safety**  
Studies have demonstrated a wide margin of safety. Pregnant and breeding cattle may be treated provided normal care is taken in handling.

**WITHHOLDING PERIODS**  
**MEAT: DO NOT USE less than 28 days before slaughter for human consumption.**  
**MILK: Zero (0) days.** There is a NIL milk withholding period for lactating dairy cattle.

**TRADE ADVICE - EXPORT SLAUGHTER INTERVAL (ESI)**  
DO NOT USE less than 42 days before slaughter for export. The ESI on this label was correct at the time of label approval. Before using this product, confirm the current ESI from AIRR on (03) 5820 8400 or the APVMA website ([www.apvma.gov.au/residues](http://www.apvma.gov.au/residues)).

**SAFETY DIRECTIONS**  
Poisonous if swallowed. Avoid contact with eyes, skin and clothing.

**FIRST AID**  
If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

**ADDITIONAL USER SAFETY INFORMATION**  
For further information refer to the safety data sheet.

**ENVIRONMENTAL PROTECTION**  
Ivermectin is extremely toxic to aquatic species. Do not contaminate dams, rivers, streams or other waterways with the chemical or used container.

**DISPOSAL**  
Dispose of container and outer packaging by wrapping with paper and putting in garbage.

**STORAGE**  
Store below 30°C (room temperature). Store bottle in carton to protect from light.

APVMA Approval No.: 90419/131992

**DIRECTIONS FOR USE**  
**Restraints:**  
**Re-treatment interval: DO NOT re-treat animals for 28 days after last treatment.**

**Dosage and Administration:**  
IO MECTEC PLUS INJECTION is to be given by subcutaneous injection only. The recommended dose is 1 mL per 50 kg liveweight (equivalent to 0.2 mg ivermectin per kg and 2 mg clorsulon per kg liveweight).

Inject under loose skin high on the neck, behind the ear in an area away from the more valuable carcass muscle. Loose skin on the neck in front of the shoulder is also a suitable site. This product is not to be used intravenously or intramuscularly.

Liveweight (kg)	Dose (mL)	No. of animals treated	Liveweight (kg)	Dose (mL)	No. of animals treated
Up to 100	2	250	351 - 400	8	62
101 - 150	3	166	401 - 450	9	55
151 - 200	4	125	451 - 500	10	50
201 - 250	5	100	501 - 550	11	45
251 - 300	6	83	551 - 600	12	41
301 - 350	7	71	601 - 650	13	38

Cattle heavier than 650 kg should be dosed at 1 mL per 50 kg. A representative sample of animals should be weighed before treatment either with scales or a weighband. Dose rate to be based on the heaviest cattle in each group (bulls, cows, steers, calves, etc.) Do not underdose. Where there is a large variation in size within the group, draft into two or more lines based on bodyweight, to avoid excessive overdosing.

**General Directions:**  
**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION**

IO MECTEC PLUS INJECTION is an injectable parasiticide for cattle. One low-volume dose effectively kills internal parasites (including adult liver fluke) and external parasites that impair the health and productivity of cattle. The convenience and broad-spectrum efficacy of IO MECTEC PLUS INJECTION makes it an ideal product for effective parasite control.

**PRODUCT DESCRIPTION**  
IO MECTEC PLUS INJECTION is a ready-to-use, sterile solution of ivermectin and clorsulon. Ivermectin is derived from the avermectins, a family of potent broad-spectrum antiparasitic agents which are isolated from fermentation of the naturally occurring soil-organism *Streptomyces avermitilis*. Clorsulon is for the treatment of adult liver fluke.

**MODES OF ACTION**  
Ivermectin is a member of the macrocyclic lactone class of endectocides which have a unique mode of action. Compounds of the class bind selectively and with high affinity to glutamate-gated chloride ion channels which occur in invertebrate nerve and muscle cells. This leads to an increase in the permeability of the cell membrane to chloride ions with hyperpolarization of the nerve or muscle cell, resulting in paralysis and death of the parasite. Compounds of this class may also interact with other ligand-gated chloride channels, such as those gated by the neurotransmitter gamma-aminobutyric acid (GABA).

The margin of safety for compounds of this class is attributable to the fact that mammals do not have glutamate-gated chloride channels, the macrocyclic lactones have a low affinity for other mammalian ligand-gated chloride channels and they do not readily cross the blood-brain barrier.

Clorsulon is rapidly absorbed into the circulating blood. Erythrocytes with bound drug, as well as plasma, are ingested by *Fasciola hepatica* (liver flukes). Adult flukes are killed by clorsulon because of inhibition of enzymes in the glycolytic pathway, which is their primary source of energy.

**Made for AIRR**  
74-76 Drummond Rd  
Shepparton VIC 3630  
P 03 5820 8400  
[independentsown.com.au](http://independentsown.com.au)

**BATCH:**  
**EXPIRY:**

IO MECTEC PLUS INJECTION contains ivermectin, a member of the macrocyclic lactone family of chemicals, which is effective against internal and external parasites sensitive to this family. It also contains clorsulon, a sulphonamide, which controls adult liver fluke.

IO MECTEC PLUS INJECTION is effective against sensitive strains of the following internal and external parasites:

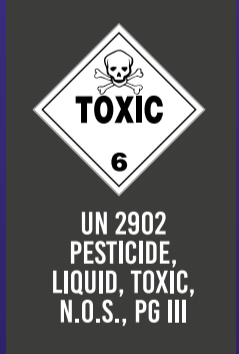
- Gastrointestinal roundworms:**  
**Adult and immature stages**  
Ostertagia ostertagi - Small Brown Stomach Worm (including third and fourth stage larvae and inhibited fourth stage larvae)  
O. lyrata - Brown Stomach Worm  
Haemonchus placei - Barber's Pole Worm (including third and fourth stage larvae)  
Trichostrongylus axei - Stomach Hair Worm  
Trichostrongylus colubriformis - Intestinal Hair Worm  
Cooperia spp. - Small Intestinal Worm (including third and fourth stage larvae)  
Oesophagostomum radiatum - Nodule Worm (including third and fourth stage larvae)  
Bunostomum phlebotomum - Hookworm (including third and fourth stage larvae)
- Adult stages**  
Nematodirus spathiger, Nematodirus helvetianus - Thin Necked Intestinal Worm  
Strongyloides papillosus - Intestinal Threadworm  
Toxocara vitulorum - Large Roundworm  
Trichuris spp. - Whipworm

- Adult Liver Fluke:** Fasciola hepatica  
**Lungworm:** Dictyocaulus viviparus (adult and immature) including inhibited stages.  
**Eyeworm:** Thelazia spp. (adult stages).  
**Screw Worm Fly:** Chrysomya bezziana (parasitic larval stages). (Not reported in Australia but present in Papua-New Guinea).  
**Sucking Lice:** Linognathus vituli, Haematopinus eurysternus, Solenopotes capillatus. Does not provide full control of the cattle biting louse,ovicola (Dermatobia) bovis.  
**Mites:** Sarcoptes scabiei var. bovis.  
**Cattle Tick:** Rhipicephalus (Boophilus) microplus including organophosphate, synthetic pyrethroid and amidine resistant strains.  
Maximum efficacy is reached 4-5 days after treatment. Engorged female ticks that drop from cattle in the initial days after treatment may lay viable eggs. This should be taken into account when planning a strategic tick control program. IO MECTEC PLUS INJECTION should be alternated with conventional dips or pour-ons when the program requires repeat treatments.

**PERSISTENT ACTIVITY**  
At the recommended dose rate, IO MECTEC PLUS INJECTION effectively controls infections with Ostertagia spp. and Cooperia spp. acquired up to at least 7 days after treatment, and Dictyocaulus viviparus and Chrysomya bezziana acquired up to at least 14 days after treatment.

When used as directed for control of internal parasites of cattle, IO MECTEC PLUS INJECTION concurrently aids in control of:

**Mites:** Oronotus bovis  
Resistance may develop to any chemical.



**Harmful if contact with skin.**  
**Causes serious eye irritation.**  
**May damage fertility or the unborn child.**  
**May cause harm to breast-fed children.**  
Do not handle until all safety precautions have been read and understood.  
Avoid contact during pregnancy or while nursing.  
Wash contacted areas thoroughly after handling.  
If exposed or concerned or if eye irritation persists: Get medical advice.  
Store locked up and in a well-ventilated place. Keep cool.