



Product Name: AKULA CONCENTRATE FOR LICE, FLY AND WORMS  
APVMA Approval No: 88356/128829

Label Name:	AKULA CONCENTRATE FOR LICE, FLY AND WORMS
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Signal Headings:	CAUTION KEEP OUT OF REACH OF CHILDREN FOR ANIMAL TREATMENT ONLY READ SAFETY DIRECTIONS BEFORE OPENING OR USING
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Constituent Statements:	16 g/L IVERMECTIN
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Claims:	<p>A multi-purpose concentrate for use in sheep of all ages. The 16.0 g/L ivermectin concentrate is diluted</p> <ul style="list-style-type: none"><li>• 1:20 and administered orally to sheep by drenching for control of internal parasites and some ectoparasites; and</li><li>• 1:500 and applied by jetting for the treatment of, and protection against, sheep blowfly strike and by hand jetting for long-wool lice treatment.</li></ul> <p>ORAL DRENCH: AKULA CONCENTRATE FOR LICE, FLY AND WORMS contains ivermectin, a member of the macrocyclic lactone family of drenches. At the recommended dosage level, this product is effective for the treatment and control of ivermectin sensitive strains of the following adult and immature parasites of sheep:</p> <ul style="list-style-type: none"><li>• Barber's Pole Worm (<i>Haemonchus contortus</i>) including inhibited L4 stage,</li><li>• Large Stomach Worm (<i>Haemonchus placei</i>),</li><li>• Small Brown Stomach Worm [<i>Teladorsagia (Ostertagia) circumcincta</i>](including inhibited L4 stage),</li><li>• Stomach Hair Worm (<i>Trichostrongylus axei</i>),</li><li>• Black Scour Worm (<i>Trichostrongylus</i> spp),</li><li>• Small Intestinal Worm (<i>Cooperia</i> spp),</li><li>• Thin-necked Intestinal Worm (<i>Nematodirus</i> spp),</li><li>• Large Mouthed Bowel Worm (<i>Chabertia ovina</i>),</li><li>• Nodule Worm (<i>Oesophagostomum columbianum</i>),</li><li>• Large Bowel Worm (<i>Oesophagostomum venulosum</i>),</li><li>• Whipworm (<i>Trichuris ovis</i>),</li><li>• Intestinal Threadworm (<i>Strongyloides papillosus</i>),</li><li>• Nasal Bot (<i>Oestrus ovis</i>) (parasitic larval stages only),</li><li>• Large Lungworm (<i>Dictyocaulus filaria</i>) and</li><li>• Itchmite (<i>Psorergates ovis</i>).</li></ul> <p>Effective against benzimidazole, levamisole and morantel resistant strains of <i>H. contortus</i>, <i>T. circumcincta</i> and <i>T. colubriformis</i>.</p>
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Internal nematode (roundworm) parasites may develop resistance to drenches (anthelmintics). If drench (anthelmintic) failure with this product is suspected, seek veterinary confirmation and notify the manufacturer. Ask your local veterinary practitioner or animal health adviser for recommended parasite management practices for your area to reduce development of resistance. It is advisable that a drench resistance test be conducted before any drench is used.

**JETTING FOR BLOWFLY STRIKE:**

For the treatment of, and protection against, blowfly strike on sheep for up to 12 weeks under low to moderate fly pressure and treatment of biting lice by jetting in long woolled sheep.

This product is a concentrate for use in sheep of all ages. The product is NOT to be used undiluted. The 16.0 g/L Ivermectin concentrate is diluted 1:500 and applied by jetting for the treatment of, and protection against, sheep blowfly strike and by hand jetting for long-wool lice treatment.

When applied as directed by hand-jetting or by modified Harrington jetting race this product protects sheep against strike by blowflies (*Lucilia cuprina*, *L. sericata*, *Chrysomya rufifacies* and *Calliphora nociva*) (including OP resistant strains of *Lucilia cuprina*) for 12 weeks under low to moderate fly pressure and will control maggots in existing strikes in the treated areas.

**HAND DRESSING OF STRUCK SHEEP:** This product can be applied at the blowfly dilution rate for treatment of blowfly strike wounds. Sheep should be sheared / clipped around the strike wound before saturating the area.

**HAND JETTING FOR LICE:** When applied as directed by hand-jetting this product also treats biting lice (*Bovicola ovis*), including synthetic pyrethroid resistant strains in long woolled sheep until the next shearing.

**RESISTANCE MAY DEVELOP TO ANY CHEMICAL**

Net Contents:	250 mL, 1 L, 5 L, 10 L and 20 L
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Directions for Use:	
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Restrains:	Jetting: DO NOT USE in plunge or shower dips. DO NOT USE jetting races that recycle fluid. DO NOT collect and re-use fluid which runs off
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Contraindications:	Product is NOT to be used undiluted.
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Precautions:	It is recommended that clean water (dam/tank) be used for dilution. Use of treated municipal supply town water is not recommended if the diluted product is going to be stored.  Blowfly strike: When used on sheep with less than 6 weeks wool a reduced period of protection may result.  Sheep lice: After shearing, sheep should be re-treated with an effective off-shears or short- wool product.
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Side Effects:	Oral Drench Some sheep may show slight transient cough after treatment.
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Dosage and Administration:	This section contains file attachment.
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General Directions:	<p>Use caution with the handling and treatment of weak and pregnant animals.</p> <p>Oral Drench USE DILUTED ORAL DRENCH WITHIN 28 DAYS OF DILUTION.</p> <p>AKULA CONCENTRATE FOR LICE, FLY AND WORMS may be used in sheep of all ages and ewes may be treated at any stage of pregnancy.</p> <p>Jetting USE DILUTED JETTING FLUID WITHIN 28 DAYS OF DILUTION.</p> <p>Use a jetting pump preferably fitted with a pressure gauge and capable of maintaining at least 550 kPa (80 psi) during jetting. Run the pump to ensure thorough mixing of the jetting wash before use. Pressures of about 630 kPa (90 psi) should be used for sheep with long wool. For lambs, the pressure should be reduced to 280-350 kPa (40-50 psi). NOTE: Check the sheep to ensure wetting to skin level after jetting. Efficacy may be reduced if sheep are not treated as directed.</p> <p>When used as directed by jetting, AKULA CONCENTRATE FOR LICE, FLY AND WORMS has a wide safety margin in sheep and may be used in breeding animals. When applied as directed AKULA CONCENTRATE FOR LICE, FLY AND WORMS will not damage fleece or skin.</p> <p>Season, weather conditions, sheep type, wool length and condition, soiling with faeces and urine and any concurrent skin or fleece diseases such as fleece rot, mycotic dermatitis and other infections or wounds will influence the susceptibility of sheep to flystrike. Thorough wetting of those sites most attractive to flies is the most effective way to prevent blowfly strike. Hand jetting is recommended to ensure adequate wetting.</p> <p>Jetting races have varying ability to saturate the fleece so the duration of protection may be shorter than with hand jetting. Jetting races or other jetting equipment which recycles the jetting fluid should not be used to apply AKULA CONCENTRATE FOR LICE, FLY AND WORMS.</p> <p>When applied as directed by hand jetting, exposure to moderate rainfall does not have any adverse effect on the efficacy of AKULA CONCENTRATE FOR LICE, FLY AND WORMS.</p> <p>If the sheep need to be handled for other management procedures, it is recommended that use of AKULA CONCENTRATE FOR LICE, FLY AND WORMS is the final activity carried out.</p> <p>NOTE: Storage at low temperatures (&lt;4°C) may result in formation of small crystals in AKULA CONCENTRATE FOR LICE, FLY AND WORMS which will redissolve on dilution and will not affect the efficacy or safety of the product.</p> <p>NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.</p>
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Withholding Periods:	Oral Drench MEAT: DO NOT USE less than 14 days before slaughter for human consumption.
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	<p>MILK: DO NOT USE in lactating ewes or within 28 days of lambing where milk may be used or processed for human consumption.</p> <p>Jetting MEAT: DO NOT USE less than 7 days before slaughter for human consumption. MILK: DO NOT USE in lactating ewes or within 28 days of lambing where milk may be used or processed for human consumption.</p> <p>WOOL HARVEST INTERVAL: DO NOT USE less than 6 weeks before shearing or fibre collection.</p>
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Trade Advice:	<p>Oral Drench EXPORT SLAUGHTER INTERVAL (ESI):DO NOT USE less than 21 days before slaughter for export. Before using this product, confirm the current ESI from the APVMA website <a href="http://www.apvma.gov.au/residues">www.apvma.gov.au/residues</a> or by calling ZAGRO AUSTRALIA PTY LTD on 1800 144 884.</p> <p>Jetting EXPORT SLAUGHTER INTERVAL (ESI):DO NOT USE less than 7 before slaughter for export. Before using this product, confirm the current ESI from the APVMA website <a href="http://www.apvma.gov.au/residues">www.apvma.gov.au/residues</a> or by calling ZAGRO AUSTRALIA PTY LTD on 1800 144 884.</p> <p>Use of this product may result in wool residues that may not comply with European Union Environmental quality Standards.</p> <p>Wool treated with this product may contain detectable residues: adequate treatment records should be kept and made available, if requested by wool buyers.</p>
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Safety Directions:	<p>Poisonous if swallowed. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. When preparing product for use, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow length gloves. Wash hands after use.</p>
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First Aid Instructions:	<p>If poisoning occurs, contact a doctor or Poisons Information Centre, Phone Australia 13 11 26.</p>
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First Aid Warnings:	
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Additional User Safety:	<p>Sheep Re-handling Interval: After treatment wait until sheep are dry before re-handling. Additional information is listed in the Safety Data Sheet.</p>
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Environmental Statements:	<p><b>ENVIRONMENTAL PROTECTION</b> Ivermectin is extremely toxic to aquatic species. DO NOT contaminate dams, rivers, streams or other waterways with the chemical or used container.</p>
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Disposal:	<p>Triple-rinse container into the medicated water or drench. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean container to recycler or designated collection point. If not recycling, break, crush, or puncture container and deliver to an approved waste management facility. If an approved waste management facility is not available, bury the broken, crushed or punctured containers 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.</p>
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Storage:

Store below 30°C (Room Temperature) in the closed, original container. Store bottle in carton to protect from light.

**DOSAGE AND ADMINISTRATION**

**ORAL DRENCH**

**DILUTE BEFORE USE.  
USE DILUTED DRENCH WITHIN 28 DAYS OF DILUTION**

Before commencing drenching read the label carefully. AKULA CONCENTRATE FOR LICE, FLY AND WORMS must be diluted 1:20 with water prior to use as an oral drench. For example, 250 mL of AKULA CONCENTRATE FOR LICE, FLY AND WORMS dilutes to 5 Litres of oral drench; 1 Litre dilutes to 20 L of oral drench.

AKULA CONCENTRATE FOR LICE, FLY AND WORMS should be administered orally using accurate drenching equipment which provides a consistent dose volume. Check and clean equipment thoroughly before and after use.

WEIGHT RANGE (Kg)	DOSE VOLUME (mL)
11-20	5.0
21-30	7.5
31-40	10.0
41-50	12.5
51-60	15.0
61-70	17.5
71-80	20.0

Animals under 11 kg and heavier than 80 kg to be dosed at 2.5 mL per 10 kg

A representative sample of animals should be weighed before treatment. Dose the mob according to the heaviest animal by liveweight in each group (ewes, wethers rams, lambs). Do not underdose. Where there is a large variation in size within the group, dose rate should be based on the label directions for each weight range. Drafting into two or more lines may be appropriate, to avoid excessive overdosing.

**JETTING**

**DILUTE BEFORE USE.  
USE DILUTED JETTING FLUID WITHIN 28 DAYS OF DILUTION.**

**AKULA CONCENTRATE FOR LICE AND FLY AND WORMS** requires dilution with water prior to use as a jetting fluid. See the use table for instructions.

**MIXING INSTRUCTIONS**

Ensure equipment is thoroughly cleaned prior to use. AKULA CONCENTRATE FOR LICE, FLY AND WORMS should be mixed with water in a container of known volume. Testing has confirmed that AKULA CONCENTRATE FOR LICE, FLY AND WORMS mixes with waters of various hardness.

Use either a jetting handpiece with multiple nozzles that can be combed through the fleece or a (Dutjet) jetting wand. The jetting handpiece should deliver a penetrating jet of fluid without producing a spray or mist. A modified Harrington jetting race can also be used. It should be noted the effectiveness of various races differ and testing has not been performed on all types of races available.

ANIMAL/PEST	TREATMENT	RATE	CRITICAL COMMENTS
Sheep/Blowflies  <i>(Lucilia cuprina, L. sericata, Chrysomya rufifacies and Calliphora nociva)</i>	Jetting: Prevention of blowfly strike	200 mL/100 L  Dilute 200 mL of concentrate in 100 L of water.	<p>Use at least 2.5 L diluted jetting fluid per head.</p> <p>Jet immediately prior to expected blowfly waves. Wool must be thoroughly saturated to skin level along the backline and breech. The pizzle area of wethers and the poll, (particularly in horned sheep) must also be treated.</p> <p>For use on sheep more than six weeks after shearing.</p> <p>When used on sheep with less than 6 weeks wool a reduced period of protection may result.</p> <p>This product is not recommended for use in jetting races because a reduced period of protection may result unless jetting race has been modified in accordance with Agriculture NSW recommendations.</p>
	Jetting: Treating existing flystrike		Use at least 2.5 L diluted jetting fluid per head. <b>AKULA CONCENTRATE FOR LICE, FLY AND WORMS</b> will control maggots in existing strikes in treated areas.
	Hand Dressing: Treating existing strikes		Saturate struck area thoroughly. Wool must be saturated to skin level.
Sheep/Lice ( <i>Bovicola ovis</i> )	Hand jetting: Treatment of lice in long wool.	200 mL/100 L  Dilute 200 mL of concentrate in 100 L of water.	<p>For use on sheep more than six weeks after shearing.</p> <p>Use 0.5 L of diluted jetting fluid per month of wool growth. To control biting lice in long woolled sheep, the fleece and skin must be thoroughly wet to skin level from poll to tail in a backband about 25 cm wide. Wool and skin on the sides of the neck in front of the shoulders should also be wet to skin level. Reduced effectiveness is likely if used on sheep with lumpy wool. Jetting races are not suitable for the treatment of lice infestations.</p> <p>After the next shearing, sheep should be treated with an effective off-shears or short-wool product.</p>