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Shaping the future of animal health



Virbac

HEALTH PLAN FOR SHEEP FOR IMPROVED PRODUCTION AND REPRODUCTION

Virbac RSA (Pty) Ltd (Reg. No. 1990/003743/07) Private Bag X115, Halfway House 1685, South Africa. Tel: (012) 657-6000 Shafing the future of animal health



Health plan for lambs ...

BETTER MANAGEMENT OF LAMBS RESULT IN:

Maximum growth

Heavier weaning mass

INCREASED PROFITS

Healthier lambs

Higher weaning %

INCREASED PROFITS

Ensure maximum growth

Ensure lambs are provided with the best products and treatment during the first few months of their lives. This will result in maximum growth.

- Protect lambs against internal parasites through an effective drench programme.
- Treat lambs against external parasites.
- Boost growth and immunity with trace elements and vitamin supplements.
- Vaccinate lambs against common diseases as recommended by your veterinarian.

Ensure healthy lambs

DON'T ALLOW INTERNAL PARASITES TO DEVOUR YOUR PROFITS!

Roundworms and Tapeworms							
Growth (kg) over 8 weeks (2 doses 4 weeks apart) * Data on file							
Not treated	7.56 kg						
Treated against Roundworms	8.53 kg	13% higher than non treated lar	nbs				
Treated against Round- worms and Tapeworms	10.53 kg 39% higher than untreated lam Effect of Tapeworms = 24%		os				

Nasalworm

Growth (kg) over 8 weeks

Treated against Roundworms	1.7 kg
Treated against Roundworms	2.7 kg 59% better growth

* Data on file



Growth (kg)	* Data on file		
Lambs not infected with Liverfluke	11.8 kg	59 % better growth	
Lambs infected with Liverfluke	7.4 kg		

^{*} Tested over 24 weeks



Good lamb management from early on ensures:

Heavier weaning lambs

Ewes reaching optimum mating mass at first mating

More lambs during lifetime



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Health plan for lambs

PRODOSE® Green

ALBENDAZOLE 1,9% m/v

Proven broad spectrum drench for lambs

BROAD SPECTRUM CONTROL OF

Roundworms

Milk Tapeworm

Liverfluke

OVICIDAL

Reduces pasture contamination

IDEAL FOR

Lamb drenching

General broad spectrum treatment



The most effective Benzamidazoles are those with the longest half life – of which Albendazole is one.

Dose: 2 mℓ per 10 kg

For Liverfluke control dose: 2,5 mℓ per 10 kg

Prodose® Green, Albendazole 1.9 % m/v, Reg. No. G2089 (Act 36/1947), Namibia Reg. No. V95/18.1.1/42 NSO

Prodose" Orange

PRODOSE® Orange

SA & Namibian Farmers' favourite drench (SAAHA STATS)

BROAD SPECTRUM

Roundworms

Nasalworm

Liverfluke

Giant Liverfluke

Milk Tapeworm

Offers:

Protection against all major parasites

Better production

Greater profits

35 DAY RESIDUAL ACTION

Wireworm

Offers:

Long lasting protection

Additional protection during the summer

months

Fewer parasites on pasture – vacuum effect

Greater production

Increased profits Peace of mind

OVICIDAL

Dose: 2 mℓ per 10 kg

ALBENDAZOLE 1,9% m/v

CLOSANTEL 3,94% m/v





Prodose® Orange, Albendazole 1.9 % m/v and Closantel 3.94% m/v, Reg. No. G2101 (Act 36/1947), Namibia Reg. No. V95/18.1.8/43 $\overline{\rm NSO}$

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ABAMECTIN 0,08% m/v

PRAZIQUANTEL 1,5% m/v

VIRBAMAX™ First Drench

Powerful comprehensive parasite control for lambs

How to use Virbamax First Drench:

COMPREHENSIVE

Controls the main

parasites that inhibit

lamb growth

Broad spectrum of

Roundworms

Milk tapeworm

Serrated tapeworm

Nasalworm

For Liverfluke

problems

Use PRODOSE Orange

Use on lambs older than 6 weeks.

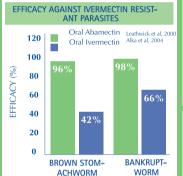
As with all drenches, vaccinate your lambs for Clostridium infections, including pulpy kidney disease, at least 14 days before drenching.

POWERFUL COMBINATION

The power of ABAMECTIN

... powerful roundworm and Nasalworm control

Virbamax First Drench



Dose: 2,5 m ℓ per 10 kg

The power of PRAZIQUANTEL

.. powerful Tapeworm control



9,2 kg over 90 days GROWTH (KG) 64,8 kg VIBRAMAX™ FIRST OTHER DRENCH

VirbamaxTM First Drench, Abamectin 0,08 % m/v and praziquantel 1.50 % m/v, Reg. No. G3084 (Act 36/1947), Namibia Reg. No. V02/18.1.8/100|\overline{NSO}|

INNOVATIVE

The first combination

of Abamectin and Pra-

ziguantel in SA

Ideal lamb drench

Launched in 2003

A new generation of

lamb drenching

Providing:

drench for 7 years

Market leading lamb

Bigger and healthier

lambs

PRODOSE® Red LEVAMISOLE 2,56 % m/v

Soluble Powder **Emergency drench for wireworm**

POWDER FORM

Available in powder form as a more affordable option. Mix with water.

CONTROLS

Wireworm

Drenches that are bound to blood proteins are less efficient when sheep are anaemic. Therefore, only when sheep exhibit symptoms of anaemia, should an emergency drench be given with a product that acts on contact.

Source: LHPG Journal Vol 3, 2006.

Dose: 3 m ℓ per 10 kg

EMERGENCY DRENCH

Use when animals are anaemic

Does not require blood protein for efficacy

Wirecide F

COMBAT RESISTANCE

Highly effective against resistance against wireworm species in sheep. Decreases production of viable Liverfluke eggs.

Lambs lighter than 25 kg should not be treated.



Dose: 1 mℓ per 25 kg

NITROXYNIL 34% m/v



Shaping the future

Health plan for ewes and rams... BETTER MANAGEMENT OF EWES AND RAMS RESULT IN:

Healthier ewes

Fertile rams

Higher lamb %

Ensure healthy ewes and rams

- Follow an effective drenching programme against internal parasites.
- Treat against external parasites.
- Vaccinate sheep against common diseases as recommended by your local Vet.
- Boost growth and immunity with trace element and vitamin supple-





Ensure higher lamb %

Guidelines for high lamb %

At the start of the mating season:

- Ewes and rams should be in excellent condition (3,5 condition score) Ewes should be as heavy as possible and rams should be as healthy as possible
- Both ewes and rams should be in a positive mass phase *1
- Rams should be free of Nasalworm, to be able to smell ewes on heat

Increase profits:

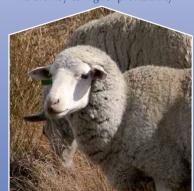
Reproduction

BIRTH OF TWINS

- most important factor affecting ewe productivity *2
- ewes weaning twins
 - = more kg lamb over lifetime
 - = more income under almost all conditions *2

Weaning %

HIGH WEANING % is the key to higher profitability



Research proves:

- For every 1 kg the ewe is heavier at mating, the lamb % is up by 1,5% to 2.5%.
- Ewes that are in excellent health and condition when mating, produce more twins.

Lamb growth

Ewes have a major impact during first few

- Milk production affects growth
- Maternal immunity affects health (growth)
- See Health plan for lambs tion on lamb growth

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ALBENDAZOLE 1.9% m/v

CLOSANTEL 3,94% m/v

PRODOSE® Orange

SA & Namibia (SAAHA STATS)
Farmers' Favourite drench



Nasalworm

Liverfluke

Giant Liverfluke

Milk Tapeworm

Offers:

Protection against all major parasites

Better production

Greater profits

Peace of mind

35 DAY RESIDUAL ACTION

Wireworm

Offers:

Long lasting protection
Additional protection
during the summer

months

Fewer parasites on pasture – vacuum effect _Greater production Increased profits



rodose Orange

PRODOSE® QUALITY = PROVEN RESULTS



CLOSANTEL 7,5% m/v

OVICIDAL

Dose: 2 mℓ per 10 kg

As per package insert
Prodose® Orange, Albendazole 1.9 % m/v and Closantel 3.94% m/v, Reg. No. G2101, Namibia Reg. No. V95/18.1.8/43 NSO

PRODOSE® Yellow LA

Affordable summer drench

BROAD SPECTRUM

Wireworm

Nasalworm

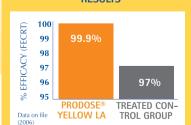
Hookworm Liverfluke

Conical fluke

35 DAY RESIDUAL ACTION Wireworm

Offers:

Parasite free for longer Better production PRODOSE® QUALITY = PROVEN
RESULTS



Dose: 1 m ℓ

Dosis: 1,3 m ℓ per 10 kg for conical fluke



CONTROL OF NASALWORM

Nov Control new spring/ early summer infestation Control late summer and autumn infestation

Drench with PRODOSE®
ORANGE or VIRBAMAX LV® to
control over wintering stage

Prodose® Yellow LA, Closantel 7.5 % m/v, Reg. No. G1959 (Act 36/1947), Namibia Reg. No. V03/18.1.3/104 NSO



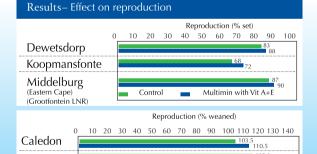
Shaping the future of animal health

VIRBAMAX LV® Low Volume Drench ABAMECTIN 0,2 % m/v POWERFUL ACTION = EFFICACY **EFFICACY AGAINST IVERMECTIN RESISTANT PARASITES** Leathwick et al, 2000 Alka et al, 2004 Oral Abamectin 120 Oral Ivermectin 100 % EFFICACY 80 60 66% 40 42% 20 BROWN STOMACHWORM BANKRUPTWORM

Virbamax LV*, Abamectin 0,2 % m/v, Reg. No. G2782, Namibia Reg. No. V01/18.1.2/127 NS0

Vitamin and mineral supplement

The product of choice: MULTIMIN® (SAAHA STATS)



Multimin with Vit A+E

When and how to use Multimin®

Bredasdorp

Multimin is injected under the skin of the neck area, using the tenting technique.

Control



Trace Minerals per 1 mℓ dose: 1 m/ weeks before lambing • 4 weeks before mating 10 mg **Mn** 1,5 mℓ • At weaning (>25 kg) 1 me • 3-4 months before mating (3 times a year – every four months)

Dosis: 1 mℓ per 10 kg

BROAD SPECTRUM PARASITE CONTROL

Broad spectrum Roundworm

Nasalworm

Australian itch mite



Oral-Vit-A

Dilute 20 me in 1e of water Repeat every 3 months if necessary

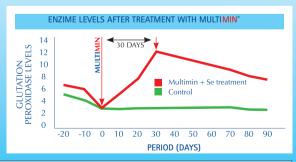
Dose: 2 mℓ per 10 kg

Oral-Vit-A, Abamectin 0,2 % m/v, Reg. No. G1037, Namibia Reg. No. VV11/17.1.2/1081 NSO

How does Multimin® work?

- Multimin provides the mineral component of various enzimes.
- Leads to a valuable increase in enzime levels.
- Increased enzime levels leads to increased natural resistance and efficient reproduction.

The total process takes 20 to 30 days as seen on graph below, therefore Multimin should be injected 4 weeks before calf/lamb and 4 weeks prior to mating.











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	Parasite	Peak activity and occurrence	Symptoms and damage	Control		
	Sheep scab Caused by a mite. Subject to regulatory control measures.	Mainly March to October - Occurs country wide	- Severe itching and biting - Biting and scratching - Wool loss - Weight loss - poor appetite	Inject: Virbamec® LA Dip:PRO-DIP CYP® 20 % - Treat all the sheep on the farm Treat twice, 7-10 days apart. Cypermethrin 20% mlv. Reg. No. V08/18.3.4/129 NSO		
	Red lice This is a biting louse that feeds on epidermal tissue and skin scabs	From May to October - Especially in stress periods Occurs country wide.	- Irritation - Biting and scratching - Poor appetite - Poor growth - Up to 1kg less clean wool - 20 % reduction in wool income	Pour on: Amipor® - Sheep and goats - Two treatments, three weeks apart		
	Karoo paralysis tick This tick releases toxins during feeding which cause paralysis.	Form February to September - Usually peaks during April and May - Outbreaks: Decreasing temperature or cold, damp and overcast. weather	- Paralysis - Death: up to 15 % of flock	Pour-on: Amipor® Dip: PRO-DIP CYP® 20 % - Treat sheep preventatively early in the season Regular monitoring Dip immediately if paralysis occurs Cypermethrin 20% m/v. Reg. No. VOB/18.3.4/129 NSO		
	Blowfly Blowflies have changed their mating habits and also attack living sheep.	Summer months - Matted wool - Crutch area where wool is dirty - Other external parasite infestations - Wounds - Occurs country wide.	Economic impact: Costs SA farmers millions of rands annually. - Wool loss - Costs of treatment - Poor appetite and growth - Deaths	Dip (Preventatively): PRO-DIP CYP® 20% Dosing: - Crutching - Treat against internal and external parasites - Treat wounds with: Reg No. G231 (Act 36/1947) Namibia Reg. No. V04/18.3.4/119 ISO WOUND-SEPT-PLUS G1521 Act 36/1947 Tail length – vulva covered Selection. Cypermethin 0.0125% m/w, Dichlorophen 0.015% m/w. Reg. No. 01521 (Act 36/1947), Namibia Reg No. V11/18.1.9/1082 NSO		



PRO DIP CYP® 20 %



- Contains : 1% m/v Amitraz 1% m/v Amitraz 1 % Cypermethrin 5 % Piperonyl Butoxide
- Dose: 4 mℓ per 10 kg against Red lice
 Dose: 2 mℓ per 10 kg against Karoo Paralysis



VIRBAMEC® L

- Contains: 1% m/v Ivermectin 10% Clorsulon
- Dose: 1 mℓ per 50 kg
- Roundworms
- Liverfluke
- Sheep scab



VIRBAMEC® LA

- Contains: 1% m/v lvermectin
- Dose: 1 mℓ per 50 kg
 Roundworm



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