



MAGNESIUM CAPSULES



Rumetrace® Magnesium Capsules are an aid in the prevention of hypomagnesaemia (grass tetany or staggers) in lactating cattle.

The capsules are intra-ruminal devices that slowly release magnesium into the rumen for 9 to 12 weeks following administration.

The active constituents of each capsule are 210 grams of magnesium alloy (equivalent to 189 grams of magnesium), which is fixed to a natural rubber backing.

Figure 1 shows the typical release rate of magnesium from Rumetrace Magnesium capsules is 1.5% of the capsule weight per day.

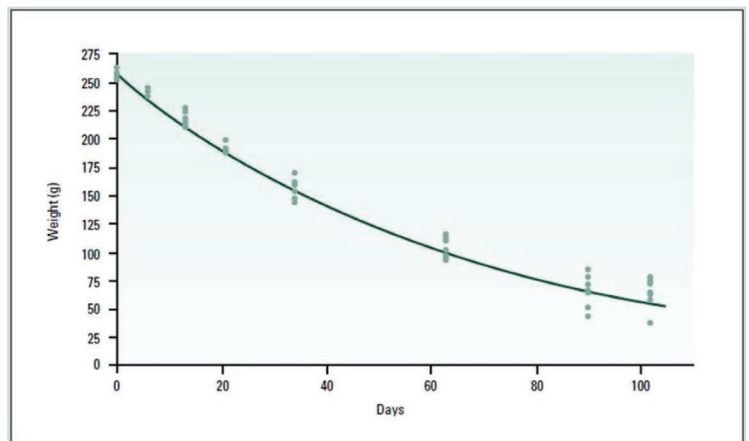


Figure 1. Release rate of magnesium from Rumetrace® Magnesium Capsules

Figure 2 shows the appearance of a capsule before use. The two semi-circular alloy sections of the capsule are fixed on the natural rubber backing. The capsule is folded prior to insertion in the applicator.



Figure 2. Rumetrace® Magnesium Capsule before use

Figure 3 shows the appearance of a capsule after 31 days in the rumen. The alloy has started to dissolve and has a pitted appearance. The natural rubber backing is largely unaffected at this stage.

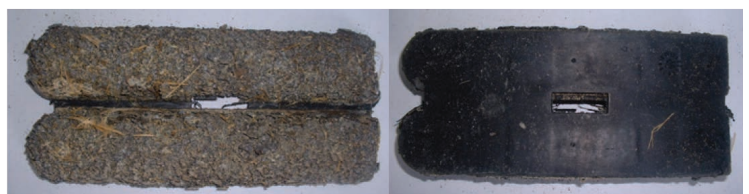


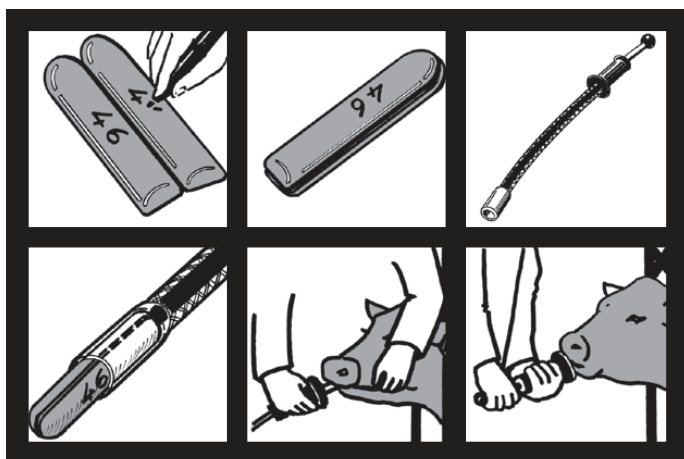
Figure 3. Rumetrace® Magnesium Capsule after 31 days in the rumen



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Directions for use

- Do not administer to cattle less than five months of age.
- When to dose: It is recommended to dose cattle 7-10 days before the grass tetany/staggers period begins.
- Which animal to dose: Lactating cows in their second and subsequent calvings are at greatest risk.



Dosing instructions

The capsules must only be administered using the Rumetrace® Magnesium Capsule Applicator.

1. Write the cow's ear tag number onto the capsule with a permanent marker pen in case a capsule is regurgitated soon after dosing.
2. Restrain the cow quietly. Placing the cow in a crush and getting an assistant to hold the head is usually necessary.
3. Ease the applicator into the mouth until the capsule is at the back of the tongue and then wait for the cow to swallow. As the cow swallows progress the applicator and capsule gently down the oesophagus.
4. Only progress the applicator and capsule over the back of the tongue as the cow swallows. Do not release the capsule at the back of tongue.
5. Fully insert the applicator so that the capsule is well into the oesophagus before releasing the capsule.

6. Release the capsule and remove the applicator after the animal has swallowed several times. Delaying the removal of the applicator from the mouth will stimulate swallowing to aid transport of the capsule to the rumen.

7. Keep stock in the yard for 15 - 20 minutes to check that no capsules are regurgitated.

Notes:

1. A cow cannot swallow while regurgitating its cud (a common reason for not swallowing). Try again a few minutes later.
2. Force must not be used during administration. If the applicator is forced into the cow, especially when it is agitated, it may pass down the windpipe. Do not dose bellowing cattle as they cannot swallow and the capsule may go into the windpipe. Releasing the capsule into the windpipe will result in sudden death.
3. If breath is being expelled up the applicator from behind the handgrip when the applicator is fully inserted, the applicator and capsule may be in the windpipe. Remove completely and redose before releasing the capsule.

Further Treatment:

Should the grass tetany/staggers risk period continue 10 weeks after initial administration, animals should be given another capsule for further protection. Yarded cattle may be given other treatments (e.g. drenching, vaccination or pour-on lice controls) at the same time because these treatments do not interfere with the magnesium capsule treatment.

NOTE: Capsule release rates are influenced by animal feed intake and individual cow magnesium metabolism. For lactating cattle with heavier demands for magnesium (such as high producing dairy cattle) the use of other magnesium supplements may be required. Supplements could include blocks with magnesium and sodium. Coarse rock salt in conjunction with the capsules may be valuable. Consult the Ridley AgriProducts or AgriHealth NZ Hypomagnesaemia technical bulletins for further information.

WITHHOLDING PERIOD: Nil