

Rumensin[®] Microtracer[®] Mason Jar Method

The feed companies that supply quality feed products to the cattle industry have utilized Elanco Rumensin as an integral component of their feeding programs. To assist feed manufacturers in providing a quality feed product to their customers, Elanco has added Microtracers to Rumensin. Microtracers can provide a quick method for confirmation of inclusion or absence of Rumensin in feed.

Microtracers are extremely small, stainless steel particles which do not impact the feed, animal, or environment when Rumensin is used. With the addition of Microtracers in Rumensin, samples of premix or supplements can be tested for the presence of Rumensin in less than 3 minutes.



MATERIALS

- 1 Scale suitable for weighing 100 grams of feed
- 2 Advantec[®] No.1 filter paper, 70 mm diameter
- 3 Coffee mill or blender
- 4 Developing solution (70% alcohol — IPA rubbing or ethanol)*
- 5 Pint mason jar
- 6 Special annular magnetic cap
- 7 Hot plate or mug warmer

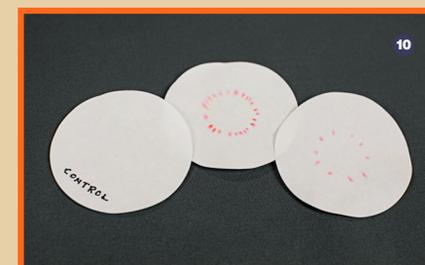
Rumensin Microtracer Kit items should be used and reserved for use with this testing kit only.

*Rarely, where pH of feed is low, a few drops of ammonia must be added to the developing solution.



TEST METHOD

- 1 Turn on the hot plate (250°F-300°F or 120°C-150°C) or mug warmer.
- 2 Weigh about 100 grams of feed (grind feed if in pellet form).
- 3 Transfer the feed to the mason jar.
- 4 Insert filter paper into the magnetic cap and close jar.
- 5 Shake jar so that the entire sample contacts filter paper within cap. Shake for at least 1 minute.
- 6 Tap the cap to remove any feed that has adhered to the filter paper. Remove the cap and place on a flat surface with the filter paper visible.
- 7 Transfer 10-15 drops of the 70% alcohol developing solution to the center of the filter paper. Let the alcohol diffuse outward through the ring of trapped Microtracer particles.
- 8 Remove the filter paper from the cap using a spatula or small knife. Allow the alcohol to evaporate for at least 30 seconds. Then place the filter paper on the heated hot plate or mug warmer.
- 9 Observe the color on the filter paper for qualitative identification.
- 10 Red/pink spots indicate Rumensin is in the feed sample. If needed, repeat the test using pure ethanol to develop the color. Yellow spots that fluoresce under an ultraviolet black light will appear.



Elanco
Rumensin

- A negative result with the tracer test does not guarantee the absence of Rumensin in finished feed
- If a feed assay to determine the level of monensin sodium is required, contact your Elanco representative
- As a good manufacturing practice, avoid manufacturing feeds for horses directly after cattle feed containing Rumensin
- A daily positive control test must be performed on feeds manufactured that day and known to contain Rumensin 90 premix
- **Following the recovery of tracer from a sample yielding a positive result, the mason jar should be brushed clean to avoid contamination of other feeds, which could thereby yield a false positive test result**

DIRECTIONS FOR USE

For increased milk production efficiency (production of marketable solids-corrected milk per unit of feed intake)

Total mixed rations (complete feed): Feed continuously to dry and lactating dairy cows a total mixed ration (complete feed) containing 11 to 22 g/ton Rumensin on a 100% dry matter basis.

Component feeding systems (including topdress): Feed continuously to dry and lactating dairy cows a Type C Medicated Feed containing 11 to 400 g/ton monensin. The Type C medicated feed must be fed in a minimum of 1 pound of feed per cow per day to provide 185 to 660 mg/head/day monensin to lactating cows, or 115 to 410 mg/head/day monensin to dry cows. This provides cows with similar amounts of monensin they would receive by consuming total mixed rations containing 11 to 22 g/ton monensin on a 100% dry matter basis.

Growing cattle on pasture or in dry lot (stocker and feeder and dairy and beef replacement heifers): For increased rate of weight gain. Feeding directions: Feed at the rate not less than 50 nor more than 200 mg per head per day in not less than 1 pound of Type C Medicated Feed; or after the 5th day, feed at the rate of 400 mg per head per day every other day in not less than 2 pounds of Type C Medicated Feed. The monensin concentration in the Type C Medicated Feed must be between 15 and 400 grams per ton. During the first 5 days, cattle should receive no more than 100 mg per day contained in not less than 1 pound of feed. Do not self-feed.

For the prevention and control of coccidiosis due to *Eimeria bovis* and *Eimeria zuernii*: Feeding Directions: Feed at a rate to provide 0.14 to 0.42 mg per pound body weight per day, depending upon severity of challenge, up to a maximum of 200 mg per head per day. The monensin concentration in Type C Medicated Feed must be between 15 and 400 grams per ton. During the first 5 days, cattle should receive no more than 100 mg per day contained in not less than 1 pound of feed.

The label contains complete use information, including cautions and warnings. Always read, understand, and follow the label and use directions. Consumption by unapproved species or feeding undiluted may be toxic or fatal. Do not feed to veal calves.

Warning: When mixing and handling Rumensin 90, use protective clothing, impervious gloves, and a dust mask. Operators should wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse with water.

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