

FOR ANIMAL TREATMENT ONLY

SMARTSHOT® B₁₂ PLUS SE

Long-acting vitamin B₁₂ and selenium injection for sheep and cattle.

ACTIVE CONSTITUENTS

Each ml contains 3 mg hydroxocobalamin hydrochloride encapsulated in a lactide/glycolide co-polymer for extended release and 12 mg selenium as barium selenate.

USES

For long term prevention and treatment of cobalt (vitamin B₁₂) and selenium deficiencies in sheep and cattle, especially when grazing cobalt and selenium deficient pastures. Cobalt deficiency in soil or pasture leads to low vitamin B₁₂ in body tissues. Vitamin B₁₂ is an essential cofactor for energy and protein metabolism in ruminants, and a deficiency may cause anorexia leading to ill thrift, starvation and poor growth, particularly in young animals.

Selenium is an essential trace element that influences immune system responsiveness, and maintains the integrity of cell membranes through the action of antioxidant selenoenzyme glutathione peroxidase. A deficiency can cause white muscle disease (myopathy) that limits the growth of young animals and reduces fertility in ewes and cows.

LAMBS

- Lambs for slaughter: 0.5 ml. Following injection of lambs with 0.5 ml of SMARTSHOT® B₁₂ PLUS SE from three weeks of age (at docking/tailing time), vitamin B₁₂ and selenium levels will be maintained at adequate concentrations for 3-4 months until time of slaughter. Avoid simultaneous use of other selenium-containing products.
- Lambs as ewe replacements: 1 ml. Following injection of lambs with 1 ml of SMARTSHOT® B₁₂ PLUS SE from three weeks of age (at docking/tailing or weaning time), vitamin B₁₂ and selenium levels will be maintained at adequate concentrations for 180 days, and in some cases the effect may be for 200 to 240 days. However, users are advised to consult their veterinarian before assuming adequacy beyond 180 days. Avoid simultaneous use of other selenium-containing products.

EWES

Following the pre-mating injection of ewes with SMARTSHOT® B₁₂ PLUS SE, vitamin B₁₂ and selenium levels will be maintained at adequate concentrations for 180 days and in some cases the effect may be for 200 to 240 days (especially for selenium). However, users are advised to consult their veterinarian before assuming adequacy beyond 180 days. Adequate levels will be maintained in the offspring until one month of age for vitamin B₁₂, and from birth to weaning for selenium. Avoid simultaneous use of other selenium-containing products.

CALVES

Following injection of calves with SMARTSHOT® B₁₂ PLUS SE from three weeks of age, serum vitamin B₁₂ levels will be maintained at concentrations ensuring adequacy for up to three and a half months, and selenium levels for at least ten months. Avoid simultaneous use of other selenium-containing products.

Before use veterinary advice should be sought to establish selenium and cobalt concentrations in pasture, and vitamin B₁₂ levels in blood and liver of the animals to ensure that other causes of ill thrift are not overlooked. Veterinary advice should also be obtained on the selenium status of the animals and of risks associated with other routine treatments such as anthelmintics which may contain selenium.

DOSAGE AND ADMINISTRATION

By law the user must take due care, obtaining expert advice when necessary, to avoid unnecessary pain and distress when using the product other than as directed on the label. ADMINISTER BY SUBCUTANEOUS INJECTION IN THE ANTERIOR HALF OF THE NECK ONLY. DO NOT EXCEED STATED DOSE AND FREQUENCY. ENSURE THE PRODUCT IS FULLY RESUSPENDED BEFORE USE BY SHAKING WELL BEFORE AND DURING USE.

- Lambs at docking: 0.5 ml for lambs for slaughter, 1 ml for lambs as ewe replacements.
- Lambs at weaning: 2 ml
- Ewes: 5 ml
- Calves: 1 ml per 25 kg liveweight

Administer only with a SMARTSHOT® injector. When not in use, do not hang injector below pack. Needles should be changed frequently and as necessary.

WITHHOLDING PERIODS

Nil.

PRECAUTIONS

Do not administer to lambs or calves less than three weeks of age. Do not use at the same time as any other selenised fertilizer, prill or product and do not exceed the stated dose or frequency without consulting a veterinarian. A swelling commonly occurs at the injection site. It is usually transient and will normally disappear within one month but on occasions, may take three months to resolve. Intramuscular injection may result in a more serious reaction and care with injection technique is required to ensure this does not occur.

WARNING

Barium selenate is suspected of causing genetic defects in humans. It is ecotoxic in the aquatic environment (toxic to fish and crustaceans with long-lasting effects) and in the soil environment. High concentrations of some selenium compounds have an adverse effect on plant growth. Barium selenate, because of its low solubility can persist in soil for considerable periods of time. This material is dangerous if swallowed, inhaled or absorbed through the skin. **Do not handle until**

all safety precautions have been read and understood. Avoid direct contact. If exposed or if you feel unwell call a POISON CENTRE or get medical attention/advice. Keep out of reach of children. When handling, wear chemical resistant gloves. Store locked up in original container. Keep container tightly closed and away from foodstuffs. Do not eat, drink or smoke while using. Wash hands thoroughly before meals and after use. Avoid self-inoculation Avoid contamination of soil or any water supply with product or empty container.

DISPOSAL

Dispose of the empty container in an approved landfill or other approved facility. Ensure container is completely empty. Dispose of this product only by using according to the label, or at an approved landfill or other approved facility. DO NOT use the container for any other purpose.

STORAGE

Store upright in a cool place, preferably refrigerated. Do not freeze. Protect from light.

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