SMARTShot® B12 is a long-acting, vitamin B12 injection for cattle and sheep.
• World-first microencapsulation technology.
• Vitamin B12 levels are maintained for 6 months in replacement lambs injected with 1 ml at docking/tailing.
• New Zealand developed, trialled and made.

DESCRIPTION
An oily suspension specifically formulated for treating lambs, but also suitable for ewes and calves, containing 3 mg/ml hydroxocobalamin hydrochloride encapsulated in a lactide/glycolide co-polymer for extended release. Presented in 500 ml plastic pillow packs.

INDICATION
For long term prevention and treatment of cobalt (vitamin B12) deficiency in lambs, ewes and calves, especially when grazing cobalt-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.

MODE OF ACTION
The gradual dissolution of the encapsulating polymer produces a steady, prolonged release of vitamin B12, which is necessary for optimal energy and protein metabolism in ruminants.

CONTRAINDICATIONS
Not to be administered to lambs or calves younger than 3 weeks of age. Before use, veterinary advice should be sought to establish pasture cobalt levels, and blood and liver levels of vitamin B12 in the animals, to ensure that other causes of ill thrift are not overlooked.

PERSISTENT ACTIVITY
• Lambs (for slaughter): Following injection of lambs with 0.5 ml from 3 weeks of age (at docking/tailing), vitamin B12 levels will be maintained at adequate concentrations for 3-4 months until time of slaughter.
• Lambs (as ewe replacements): Following injection of lambs with 1 ml from 3 weeks of age (at docking/tailing), vitamin B12 levels will be maintained at adequate concentrations for 180 days, and in some cases the effect may last for 200–240 days for vitamin B12 and 300 days for selenium. However, users are advised to consult their veterinarian before assuming adequacy beyond 180 days.
• Ewes: Following the pre-mating injection of ewes, vitamin B12 levels will be maintained at adequate concentrations for 180 days, and in some cases the effect may be for 200–240 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 1 month of age for vitamin B12.
• Calves: Following injection of calves from 3 weeks of age, serum vitamin B12 levels will be maintained at concentrations ensuring adequacy for up to 3½ months.

WITHHOLDING PERIODS
• Milk: Nil
• Meat: Nil

REGULATORY INFORMATION
Do not handle until all safety precautions have been read and understood. Avoid direct contact. If contact does occur, seek medical attention/advice. When handling, wear chemical-resistant gloves.

KEEP OUT OF REACH OF CHILDREN.

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

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