



TRACE MINERALS TO SUPPORT GROWTH, REPRODUCTION AND IMMUNE DEFENCE, WITH THE ENERGY FROM VITAMIN B₁₂ FOR OPTIMUM HEALTH AND PERFORMANCE IN SHEEP AND CATTLE.

PRODUCT DESCRIPTION

Chelated trace mineral injection for sheep, beef cattle and dairy cattle deficient in and/or responsive to zinc, manganese, selenium and/or vitamin B_{12} supplementation.

ACTIVE CONSTITUENTS:

26.7 g/L zinc as disodium zinc EDTA
6.7 g/L manganese as disodium manganese EDTA
3.3 g/L selenium as sodium selenite
1.4 g/L cyanocobalamin

PRODUCT BENEFITS



GROWTH

Marks-Min ZMS with B_{12} provides elements that support growth by aiding cell, bone, muscle, cartilage and connective tissue growth and development, as well as protein metabolism, DNA production, and thyroid function.



IMMUNE DEFENCE

Marks-Min ZMS with B_{12} provides elements that support immune defence by aiding in the function of the immune system and white blood cells that helps combat and resist the establishment of infections.



REPRODUCTION

Marks-Min ZMS with B_{12} provides elements that support reproduction by aiding the development of male and female reproductive organs and their functions, the process of fertilisation and also the maintenance of pregnancy.



ENERGY

Vitamin B₁₂ plays a key role for the production of energy in livestock. Energy is required for all body processes and is the backbone of all production.

INDICATIONS

Marks-Min ZMS with B_{12} contains zinc, manganese, selenium and vitamin B_{12} , which are required for optimal health, production and fertility.

Sub-optimal trace mineral and vitamin B₁₂ status, particularly during periods of stress, such as lambing/calving, mating and drying off (dairy cows) have been shown to negatively impact production, reproduction and health.

Using an injectable supplement can improve trace mineral and vitamin B_{12} status at these critical times, promoting a healthy immune system, which is important in resisting disease, and has a positive impact on reproduction.

Zinc has a role in:

- ▼ Cell production
- ▼ Skin, hair and hoof growth
- Antioxidant functions
- ▼ Disease resistance
- ▼ Reproduction/fertility

Manganese has a role in:

- Protein metabolism
- Antioxidant functions
- Bone, cartilage and connective tissue development
- Reproduction/fertility
- ▼ Embryo survival
- Glucose synthesis and utilisation

Selenium has a role in:

- ▼ Disease resistance
- ▼ Muscle growth and function
- Reproduction/fertility
- ▼ Thyroid hormone functions
- Antioxidant functions

Vitamin B₁₂ has a role in:

- Energy production and metabolism
- ▼ DNA synthesis
- ▼ Growth
- ▼ Immune system function
- Reproduction/fertility
- Milk production







DOSAGE AND ADMINISTRATION

- Administer to cattle or sheep by subcutaneous injection (under the skin) into the anterior half of the neck (the half of the neck closest to the head)
- Following withdrawal of the first dose, product can be used for 9 months from opening

CATTLE

AGE OF CATTLE	INJECTION DOSE RATE
Up to 1 year	1.5 mL per 50 kg
From 1-2 years	1.5 mL per 75 kg
Over 2 years	1.5 mL per 100 kg

SHEEP

INJECTION DOSE RATE

0.3 mL per 10 kg = 1.5 mL per 50 kg

Check the accuracy of the applicator regularly. Use correct aseptic technique. A transient local swelling may be observed at the site of injection. Divide doses greater than 10 mL between 2 injection sites. DO NOT retreat animals for 8 weeks after last treatment.

WITHHOLDING PERIODS

MEAT: Zero (0) days | MILK: Zero (0) days

STORAGE

Store below 30 °C in original box, in a dry place. Protect from light.

PACK SIZE

500 mL

INJECTABLE APPLICATOR

The Marks-Min injectable applicator with forward selectable dose volume has been specifically developed in NZ to be used with all Marks-Min injectable solutions. Applicators are available from your veterinary clinic on purchase of Marks-Min products.





SHEEP



