

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

PRODUCT DESCRIPTION

Chelated trace mineral injection for beef and dairy cattle deficient in and/or responsive to zinc, manganese, selenium, copper and/or vitamin B₁₂ 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
- 10 g/L copper as disodium copper EDTA
- 1.4 g/L cyanocobalamin

PRODUCT BENEFITS



GROWTH

Marks-Min ZMSC with B₁₂ provides elements that support growth by aiding cell, bone, muscle, cartilage and connective tissue growth and development, as well as protein metabolism, DNA production, thyroid function and nerve myelination.



IMMUNE DEFENCE

Marks-Min ZMSC with B₁₂ provides elements that support immune defence by aiding in the function of the immune system and white blood cells that help combat and resist the establishment of infections.



REPRODUCTION

Marks-Min ZMSC with B₁₂ 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 ZMSC with B₁₂ contains zinc, manganese, selenium, copper and vitamin B₁₂, which are required for optimal health, production and fertility.

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

Using an injectable supplement can improve trace mineral and vitamin B₁₂ 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

Copper has a role in:

- ▼ Iron metabolism and red blood cell development
- ▼ Bone development
- ▼ Nerve function and myelination
- ▼ Antioxidant functions
- ▼ Disease resistance
- ▼ Reproduction/fertility

Vitamin B₁₂ has a role in:

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

PROUDLY AVAILABLE FROM YOUR LOCAL PARTICIPATING VETERINARY CLINIC

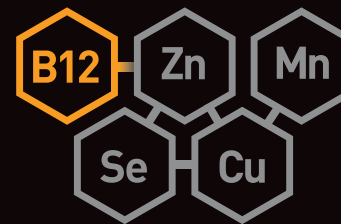
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Marks-Min[®]

ZMSC with B12

Injectable Trace Minerals with Vitamin B12 for Cattle



DOSAGE AND ADMINISTRATION

- Administer to cattle 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

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

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.

Refer to the 5 mL applicator for calves
Refer to the 12 mL applicator for cattle



TREATMENT PLAN

CALVES

- At day 1
- At weaning

DAIRY COWS

- 4 weeks before calving
- 4 weeks before mating or insemination
- 4 weeks before drying off

BULLS

- 3 months before mating
- Bulls at mating

HEIFERS

- 4 weeks before mating
- Every 3 months

BEEF COWS

- 4 weeks before mating
- 4 weeks before calving

ADDITIONAL

- Every 2 months in wet conditions

