



## Trace mineral injection with vitamin B12 to support optimal health, production and fertility in cattle and sheep.

### Product Description

Chelated trace element injection for sheep, beef and dairy cattle deficient in and/or responsive to manganese (Mn), zinc (Zn), selenium (Se) 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

1.4 g/L Cyanocobalamin

### Product Benefits

#### ✓ GROWTH

Marks-Min provides elements that support growth by aiding bone, joint and muscle development and function (Mn, Zn, Se) and energy metabolism (vitamin B12).

#### ✓ REPRODUCTION

Marks-Min provides elements that support reproduction by aiding the development of male and female reproductive systems, the process of fertilization and also the maintenance of pregnancy (Mn, Zn, Se).

#### ✓ IMMUNE DEFENCE

Marks-Min provides elements that support immune defence by aiding in the function of the immune system and white blood cells that help resist establishment of infection (Se, Zn, Mn).

#### ✓ ENERGY

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

### Indications

*Marks-Min Copper Free Injectable Trace Mineral with Vitamin B12 for Cattle & Sheep* contains selenium, zinc, manganese and vitamin B12, which are required for optimal health, production and fertility. Sub-optimal trace mineral and vitamin B12 status at parturition and mating has been shown to negatively impact production, reproduction and health.

Optimising trace element status relying solely on oral supplements may fail as a result of variation in individual intake and reduced absorption because of antagonism of other ration components and minerals to these essential trace elements.

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 division
- Maintaining the integrity of skin and mucous membranes, hair and hooves
- Wound healing
- Lung function
- Bone and cartilage development
- Disease resistance
- Reproduction / fertility – spermatogenesis, placental retention, udder function

#### Manganese has a role in:

- Protein metabolism
- Disease resistance
- Bone, cartilage and connective tissue development

- Reproduction/ fertility – ovulation, spermatogenesis, embryo survival

#### Selenium has a role in:

- Preventing cellular oxidation
- Disease resistance
- Muscle function
- Reproduction / fertility – spermatogenesis, embryo survival, placental retention

#### Vitamin B12 has a role in:

- Energy metabolism
- DNA synthesis
- Red blood cell production
- Nervous system function
- Reproduction/fertility

# Marks-Min<sup>®</sup>



## Copper Free

Injectable Trace Mineral with Vitamin B12 for Cattle & Sheep

### Dosage and Administration

Following withdrawal of the first dose, unused product should be discarded after 9 months.

Administer to sheep and cattle by subcutaneous injection.

Check the accuracy of the applicator before and during treatment.

#### Sheep

Dose rate: 0.3 mL/10 kg (1.5 mL per 50 kg)

Liveweight (kg)	Dose (mL)	1 L treats
15 – 17	0.5	2000
18 – 20	0.6	1666
21 – 24	0.7	1428
25 – 30	0.9	1111
31 – 40	1.2	833
41 – 50	1.5	666
51 – 60	1.8	555
61 – 70	2.1	476
70+	0.3 mL/10 kg	

#### Dairy and Beef Cattle

Animal Age	Injection dose rate
Up to 1 year	1.5 mL/50 kg
From 1 - 2 years	1.5 mL/75 kg
Over 2 years	1.5 mL/100 kg

DO NOT re-treat animals for 8 weeks after last treatment.

Treatment frequency depends on the nutrient status of your flock or herd. Consult your veterinarian or animal health consultant for supplementation advice specific to your situation.

### Withholding Periods


**MEAT:** Zero (0) days.


**MILK:** Zero (0) days.

**EXPORT SLAUGHTER INTERVAL (ESI):** Zero (0) days.

### Storage

Store below 30°C (room temperature) in original container, in a dry place. Protect from light. Keep container well closed.

Treatment opportunities: Sheep 	
Animal Class	Timing
Rams	4 times per year
Ewes	4 weeks pre-joining 4 weeks pre-lambing
Replacement (maiden) ewes	4 times per year. Treat 4 weeks pre-joining
Lambs	Treat at weaning

Treatment opportunities: Cattle 	
Animal Class	Timing
Bulls	3 months before joining, at joining
Beef Cows	4 weeks pre-joining 4 weeks pre-calving
Dairy Cows	4 weeks pre-calving, 4 weeks pre-mating, 4 weeks before drying off
Calves	At marking and weaning
Heifers	Every 3 months, 4 weeks pre-joining
Additional	Every 2 months in wet conditions



See product label for full claim details and directions for use. Boehringer Ingelheim Animal Health Australia Pty. Ltd., Level 1, 78 Waterloo Road, North Ryde NSW 2113 Australia. ABN 53 071 187 285. \*Marks-Min is a registered trademark of the Boehringer Ingelheim Group. AU-MSP-0158-2024