MULTINA INJECTION

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE VETERINARY MEDICINAL PRODUCT

MULTINA INJECTION

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml Contains:	
Vitamin A	15,000 IU
Vitamin D3	1,000 IU
Vitamin E	20mg
Vitamin B1	10mg
Vitamin B2	5mg
Vitamin B6	3mg
Nicotinamide	35mg
D-Pantothenol	25mg
Vitamin B12	5mcg

3. PHARMACEUTICAL FORM

Solution for Injection

4. CLINICAL INFORMATION

4.1. Target species

Horse, Cattle, Sheep, Cat,

4.2. Indications for use specifying the target species

Vitamin deficiency.

4.3. Contraindications

None

4.4. Adverse reactions (only in case of overdose)

Not Known

4.5. Dosage and administration route

Intramuscular or subcutaneous use.

Horse (500 kg): a one-time dose of 25 ml per animal;

Foal (230 kg): a one-time dose of 11.5 ml per animal;

Cattle: a one-time dose of 1 ml per 10 kg of body weight; Sheep and lamb (up to 60 kg): a single dose of 1.5 ml per 10 kg of body weight; Cat: a single dose of 2-5 ml per animal;

4.6. Overdose (symptoms, emergency procedures, antidotes), if necessary

Of the fat-soluble vitamins (A, D, E & K), A and D can be particularly toxic in case of overdose. Different animal species have varying sensitivities to the (side) effects of vitamins A and D. In cases of vitamin A overdose, both acute and chronic intoxication symptoms can occur.

Acute symptoms include lethargy, anorexia, muscle weakness, vomiting, and diarrhea; the main chronic effect is the development of bone abnormalities.

The primary intoxication symptom that occurs with vitamin D overdose is hypercalcemia, where calcium is withdrawn from the body, disrupting the calcium balance within the body. Consequences of this include, among others, bone demineralization, effects on the cardiovascular system, kidney stones, and calcification in soft tissues.

4.7 Withdrawal period: Null

5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group; Multivitamin

ATCvet code; QA11BA

- **Vitamin A**: Absorbed in the small intestine; essential for vision, immune function, and skin health in poultry.
- **Vitamin D3**: Absorbed in the small intestine; regulates calcium and phosphorus absorption, supports bone health, and enhances egg production.
- **Vitamin E**: Absorbed with lipids in the intestines; acts as an antioxidant, protects cells from oxidative damage, and supports immune function.
- **Vitamin B1** (**Thiamine**): Absorbed in the small intestine; important for energy metabolism and nerve function.
- **Vitamin B2** (**Riboflavin**): Absorbed in the small intestine; supports energy production, growth, and feather health.
- **Vitamin B6 (Pyridoxine)**: Absorbed in the small intestine; crucial for protein metabolism, enzyme function, and nervous system health.
- **Vitamin B12** (**Cobalamin**): Absorbed in the small intestine; supports red blood cell production, metabolism, and nervous system health.
- **Nicotinamide** (**Niacin**): Absorbed in the small intestine; essential for energy production, enzyme activation, and maintaining healthy skin.
- **D-Pantothenol** (**Vitamin B5**): Absorbed in the small intestine; plays a role in the synthesis of coenzyme A, which is important for metabolic processes.

6.1. Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years. Shelf life after first opening the container: use immediately, do not store.

6.2. Special precautions for storage

Store below 25°C

Protect from light and moisture.

Keep out of reach of children.

Care should be taken to ensure proper storage and handling to maintain the integrity of the product.

6.3 Nature and composition of immediate packaging

Amber glass vial of 50ml, 100 ml with sterile bromobutyl rubber stopper and aluminum flip-off seal.

6.4 Special precautions for the disposal of unused product or waste materials derived from it

Any unused veterinary medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Nawan Laboratories (Pvt.) Ltd. Plots No. 136-138, Sector-15, Korangi Industrial Area, Karachi-74900, Pakistan.

8. MARKETING AUTHORISATION NUMBER

Reg. No. 049512

9. DATE OF FIRST AUTHORISATION

Date of Reg.: 22-07-2008

10. DATE OF REVISION OF THE TEXT

05-01-2025

MANUFACTURED BY:

