# ADE MINERAL GRANULAR POWDER

## *(Vitamin A, Vitamin D, Vitamin E, , Calcium, Phosphorus, Magnesium, Sodium, Iron (as Ferrous), Zinc, Manganese, Copper, Cobalt, Iodine, Selenium)*

**SUMMARY OF PRODUCT CHARACTERISTICS**

**1 NAME OF THE VETERINARY MEDICINAL PRODUCT**

ADE MINERAL GRANULAR POWDER

**2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

Each Kg Contains:
Vitamin A …….. 0.5 MU
Vitamin D …….. 0.080 MU
Vitamin E …… 0.300gm
Calcium ……..….. 225.0gm
Phosphorus ……..…… 120.0gm
Magnesium ……..….. 25.0gm
Sodium ……..…. 20.0gm
Iron (as Ferrous)..... 1.0gm
Zinc..... 3.0gm
Manganese..... 2.0gm
Copper ..... 0.600gm
Cobalt..... 0.010gm
Iodine..... 0.202gm
Selenium ..... 0.003gm

**3. PHARMACEUTICAL FORM**

Oral Powder.

**4. CLINICAL INFORMATION**

**4.1. Target species**

Dairy Cattle, Buffaloes, Sheep, Goats & Fattening Animals.

**4.2. Indications for use specifying the target species**

Vitamin and trace element deficiency.

**4.3. Contraindications**

Do not use in cases of hypersensitivity to any of the excipients.

**4.4. Special warnings for each target species**

Not Reported.

**4.5. Special precautions for use**

Special precautions for safe use in the target species:

Not Applicable.

Special precautions to be taken by the person administering the product to animals:

People with known hypersensitivity to the active substances should avoid contact with the veterinary medicinal product.
Avoid contact with eyes, skin, and mucous membranes.
Wash hands thoroughly after handling the product.
Keep out of reach of children.
In case of accidental self-injection, seek medical advice immediately and show the package leaflet or the label.

**4.6. Adverse reactions (frequency and seriousness)**

None known.
Reporting of adverse events is important. It allows the continuous monitoring of the safety of the veterinary medicinal product. Reports should be sent, preferably by the veterinarian, either to the marketing authorization holder or his local representative, or to the national competent authority via the national reporting system. Please refer to the package leaflet for the respective contact details.

**4.7. Use during pregnancy and lactation or lay**

Can be used during pregnancy, lactation and laying.

**4.8. Interaction with other veterinary medicinal products and other forms of interaction**

None known.

**4.9. Dosage and administration route**

Dairy Cows & Buffaloes: 80-1500gm per day for 7-10days in Feed.
Calves (45-75 kg): 30-40 g per day for 7-10days in feed.
Sheep & Goats: 10-20 g per day for 7-10days in feed.
Heifers & Fattening Animals: 50-100 g per day for 7-10days in feed.

**Route of administration: oral, via feed.**

**4.10. Overdose (symptoms, emergency procedures, antidotes), if necessary**

Of the fat-soluble vitamins (A, D, E and K), A and D in particular can be toxic in case of overdose. Different animal species have different sensitivities to the (side) effects of vitamins A and D. In case of overdose of vitamin A, both acute and chronic symptoms of intoxication occur. Acute symptoms are listlessness, anorexia, muscle weakness, vomiting and diarrhea; the most important chronic effect is the development of bone abnormalities. The most important symptom of intoxication that occurs in case of overdose of vitamin D is hypercalcemia, in which calcium is withdrawn from the body and the calcium balance

in the body is disturbed. Consequences of this include bone decalcification, effects on the cardiovascular system, kidney stones and calcium deposits in soft tissues.

**4.11. Special restrictions on use and special conditions of use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products, in order to limit the risk of development of resistance**

Not applicable.

**4.12. With drawl period:**

(Organ) meat: zero days.

## 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Multivitamins with minerals.
ATCvet code**: QA11AA03**

### 5.1. Pharmacodynamics properties

**Vitamin A:** Essential for vision, immune function, cell growth and differentiation, reproduction. Deficiency leads to night blindness, reproductive issues, and increased susceptibility to infections.
**Vitamin D:** Regulates calcium and phosphorus metabolism, essential for bone health. Deficiency leads to rickets (young animals) or osteomalacia (adults).
**Vitamin E:** Powerful antioxidant, protects cell membranes from oxidative damage. Deficiency can lead to muscle weakness, reproductive problems, and increased susceptibility to diseases.
**Calcium:** Essential for bone and teeth formation, muscle contraction, nerve transmission, and blood clotting. Deficiency leads to rickets, osteomalacia, and milk fever.
**Phosphorus:** Works closely with calcium for bone and teeth formation, energy metabolism, and cell function. Deficiency can lead to rickets, osteomalacia, and reduced growth.
**Magnesium:** Essential for numerous enzyme reactions, muscle and nerve function, and bone formation. Deficiency can lead to muscle weakness, tremors, and cardiac arrhythmias.
**Sodium:** Maintains fluid and electrolyte balance, essential for nerve impulse transmission and muscle function. Deficiency can lead to dehydration and muscle weakness.
**Iron (as Ferrous):** Essential component of hemoglobin, crucial for oxygen transport. Deficiency leads to anemia, weakness, and reduced growth.
**Zinc:** Involved in numerous enzymatic reactions, essential for growth, immune function, and wound healing. Deficiency can lead to growth retardation, skin lesions, and impaired immune function.
**Manganese:** Involved in bone formation, carbohydrate metabolism, and antioxidant defense. Deficiency can lead to skeletal abnormalities and impaired growth.
**Copper:** Essential for iron metabolism, bone formation, and connective tissue development. Deficiency can lead to anemia, bone abnormalities, and impaired immune function.
**Cobalt:** Essential for the synthesis of vitamin B12. Deficiency leads to anemia and impaired growth.
**Iodine**: Essential for the synthesis of thyroid hormones, which regulate metabolism. Deficiency leads to goiter and hypothyroidism.
**Selenium:** Acts as an antioxidant, protects cells from oxidative damage. Deficiency can lead to muscle weakness, reproductive problems, and immune dysfunction.

### 5.2 Pharmacokinetic information

**Vitamin A**: Absorbed in the small intestine with fat. Stored primarily in the liver. Excreted in feces and urine.

**Vitamin D**: Absorbed in the small intestine with fat. Converted to active form in the liver and kidneys. Excreted in feces and urine.

**Vitamin E**: Absorbed in the small intestine with fat. Stored in adipose tissue and other tissues. Excreted in feces and urine.
**Calcium & Phosphorus**: Absorbed in the small intestine, regulated by vitamin D. Excreted in urine and feces.
**Zinc, Sodium & Manganese, Selenium, Copper, and Cobalt:** Absorbed in the small intestine. Excreted in urine and feces.
**Iron (as Ferrous):** Absorbed in the small intestine, regulated by various factors. Excreted primarily in feces.
**Iodine:** Absorbed in the small intestine, regulated by various factors. Excreted primarily in Urine.

## 6. PHARMACEUTICAL INFORMATION

### 6.1 Incompatibilities

Do not mix with other veterinary medicinal products

### 6.2. Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years.
Shelf life after first opening the container: use immediately in 12 hour, do not store.

### 6.3. Special precautions for storage

Store below 25°C.
Do not store in the refrigerator or freezer.
Protect from light and moisture.
Keep out of the reach of children.
To be used as directed by the registered veterinary practitioner only.

### 6.4. Nature and composition of primary conditioning

Package size:

- Metalized Aluminum Foil pouch for 1kg
- Plastic Bags for 5kg
- Woven Bags for 20kg & 25kg.

SPECIAL PRECAUTIONS FOR THE DISPOSAL OF WASTE MATERIALS
UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS

Waste materials derived from the use of such products
Medicinal products should not be disposed of via wastewater or household waste.
Use return systems for unused veterinary medicinal products or waste materials derived from such products, in accordance with local requirements and national collection systems applicable to the veterinary medicinal product concerned.
Treated animals should be kept in shelters throughout the treatment period and their droppings should be collected and NOT used for soil fertilization.

## 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.: 035063

**9. DATE OF FIRST AUTHORISATION**

Date of Reg.: 13-12-2004

**10. DATE OF REVISION OF THE TEXT**

17-02-2025

**MANUFACTURED BY:**