INPEL AD3E

VITAMINS

INJECTABLE SOLUTION

Health Registration No.: RIP-FAR-316

Formula:

Each 100 ml contains:

Vitamin A (Propionate)	10,000,000 IU
Vitamin D3 (Cholecalciferol)	5,000,000 IU
Vitamin E acetate	5,000 IU
Excipients q.s.	100.0 ml

SPECIES AND DOSAGE:



DOSAGE AND ADMINISTRATION

Species	Dose
Cattle	5–10 mL
Horses	5–10 mL
Calves	5 mL
Foals	5 mL
Swine	3–5 mL
Sheep	2–3 mL
Goats	2–3 mL

ROUTE OF ADMINISTRATION: Slow intramuscular injection.

Administration should be according to the veterinarian's discretion and the severity of the condition.
In breeding animals, the dose may be repeated every **2–3 months**.

INDICATIONS:

INPEL-AD3E is indicated for the treatment and prevention of both physiological and morphological abnormalities, including eye problems, reproductive disorders, and muscular dystrophies, among other diseases caused by vitamin deficiencies in the diet. It supports the normal growth and development of young animals and protects and regenerates the skin and mucous membranes. Its administration is recommended for cattle, sheep, swine, and horses experiencing vitamin deficiencies or during physiological stages when their vitamin requirements increase.

ROUTE OF ADMINISTRATION: Slow intramuscular injection.

PHARMACOKINETICS:

Fat-soluble vitamins are absorbed in the intestine and always circulate bound to specific proteins—RBP (retinol binding protein, in the case of vitamin A) or DBP (in the case of vitamin D), or bound to lipoproteins such as chylomicrons (all of them) or to LDL and VLDL (vitamins E and K). They are then stored in the liver; the body's storage capacity is high for fat-soluble vitamins and low for water-soluble vitamins.

VITAMIN A: It is usually found in the form of retinyl esters. These esters are hydrolyzed in the intestine and are then incorporated into chylomicrons, which in birds enter the bloodstream directly and in mammals enter via the lymphatic system. Retinyl esters remain bound to chylomicrons and are taken up by the liver, where they are stored and later excreted in bile. Vitamin A is excreted in bile. Vitamins D and E are absorbed in the intestine and distributed for storage in the liver.

MECHANISM OF ACTION

Vitamin A: It is essential for the proper growth of developing animals, for the protection and regeneration of mucous membranes and skin, as well as for vision and reproduction. It maintains the structure and normal function of the body's epithelial tissues, the integrity of the urogenital tract and upper respiratory tract, and is necessary for the normal development of bone structure. It plays a role in regulating the immune system by increasing the cytotoxic efficacy of T lymphocytes and NK cells and inhibiting apoptosis.

Vitamin D: It promotes tooth growth and formation; it is an effective immunomodulator and has a positive effect on metabolism, health, and fertility; supplementation is necessary for pregnant females, lactating animals, and growing animals. It is essential for calcium absorption in the intestinal tract, as it regulates calcium excretion. Vitamin E: Plays a role in reproduction, as well as in muscular, nervous, and endocrine activity and in the immune system.

PRECAUTIONS- WARNINGS-CONTRAINDICATIONS:

- Do not administer to animals with hypervitaminosis or those with known hypersensitivity to any of the ingredients.
- Do not administer doses higher than those recommended for pregnant females.
- In cases of allergic reactions or anaphylactic shock, treat with epinephrine or antihistamines.
- Not recommended for use in species other than those authorized.

DRUG INTERACTIONS

None reported.

ADVERSE REACTIONS

No adverse reactions attributed to the product have been reported; however, hypersensitivity to any of the product's components may occasionally occur. If this happens, administer an antihistamine unless the veterinarian determines otherwise.

WITHDRAWAL

Not applicable.

COMMERCIAL PRESENTATIONS

20-ml bottle
50-ml bottle
100-ml bottle
250-ml bottle