SELENIO VITA-E

VITAMIN AND MINERAL SUPPLEMENT

ORAL SOLUTION

Health Registration No.: 1AB-11905-AGROCALIDAD

Formula:

Each 100 ml contains:

Sodium selenite	0.175 g
Vitamin E acetate .	5.0 g
Excipients q.s.	100 ml

SPECIES AND DOSAGE:



DOSAGE AND ADMINISTRATION		
SPECIES	**REFERENCE DOSE**	**PRACTICAL DOSE**
 Poultry	Selenium: 0.2 mg/kg/24 h	1 mL of SELENIO VITA E/ 4 kg of body weight
ROUTE OF ADMINISTRATION. Oral. Administer directly into the beak or mixed with drinking water. The duration of treatment depends on the veterinarian's criteria.		

INDICATIONS:

Vitamin E interacts with selenium to reduce cellular damage caused by free oxygen radicals; it prevents muscle degeneration, encephalomalacia, and exudative diathesis in cases of vitamin E and selenium deficiencies. It is indicated for treating performance-related diseases in livestock, leading to increased feed intake and nutrient utilization, higher final body weight in animals, and reduced mortality.

ROUTE OF ADMINISTRATION: Oral

PHARMACOKINETICS:

VITAMIN E
After absorption, vitamin E is transported in the circulatory system by beta-lipoproteins. It is distributed throughout all tissues and stored in adipose tissue. Vitamin E is transported only to a marginal extent across the placenta. It is metabolized in the liver and excreted primarily in bile.

SELENIUM
Most water-soluble selenium compounds (selenites, selenates, organic compounds) are readily absorbed (80–90%) in the gastrointestinal tract of mice, rats, and dogs. Sheep and cows show a lower absorption rate (30–35%), likely due to the reduction of selenite to elemental selenium by bacteria in the gastrointestinal tract of ruminants. A high degree of absorption is observed following oral administration of selenite (40 85%), selenate (95%), and selenomethionine (75–97%).

MECHANISM OF ACTION:

VITAMIN E
The most notable function of vitamin E is its role in the antioxidant system alongside vitamin C, beta-carotene, glutathione peroxidase, catalase, and superoxide dismutase. Due to its lipid nature, it comes into close contact with the phospholipids of cell membranes, where it protects polyunsaturated fatty acids from peroxidation by free radicals.
Both vitamin E and selenium are involved in cellular sulfur metabolism. Vitamin E has antioxidant properties; together with selenium, it protects against erythrocyte hemolysis and inhibits the action of peroxidase on unsaturated bonds in cell membranes.

SELENIUM
The primary mechanism of action for the physiological and pharmacological effects of selenium is its antioxidant effect on the cell membrane against hydrogen peroxide and lipoperoxides. These effects are related to the enzymatic activity of selenocysteine-containing glutathione peroxidases (GSHPx). Selenium's protective antioxidant action is partially related to that of vitamin E. Selenocysteine is also an integral component of other functional proteins and tetraiodothyronine-5'-I-deiodinase (involved in thyroid hormone metabolism), but the full extent of selenium's biochemical mode of action in the body remains to be elucidated.

PRECAUTIONS- WARNINGS-CONTRAINDICATIONS:

- Not recommended for use in species other than those authorized.
- Once diluted in drinking water, the water must be consumed in its entirety.
- Hypersensitivity to any of the ingredients.
- Keep out of reach of children and pets.

DRUG INTERACTIONS

None reported.

ADVERSE REACTIONS

None reported.

WITHDRAWAL

None.

COMMERCIAL PRESENTATIONS

100-ml bottle
1,000-ml bottle
3.8-liter gallon
20-liter pail