## **NUTRITIONAL SUPPLEMENTS**

for

## **RUMINANTS**

# COMPLEMENTARY FEED ADDITIVES





## MERRI VIT AD3E (80/40/20)

#### Complementary feed, sterile product (E. Ph.) of a high quality

**Composition:** 100 ml of the product contains:

Dietary additive – vitamins: 8 000 000 I.U. vitamin A (retinyl palmitate)

4 000 000 I.U. vitamin D3 (chole-calciferol)

2 g vitamin E ( $\alpha$ - tocopherol)

Technological additives – Emulsifiers: 91,2 g

Preservatives: 2 g

#### **Properties:**

The product is a long-life sterile vitamin solution belonging to the AD3E group. Vitamin A maintains the integrity of cell membranes and the lack of Vitamin A leads to keratosis epitheliums of the digestive tract, the respiratory system and the reproductive system. Moreover, vitamin A is responsible for rhodopsin synthesis; therefore its deficiency causes night-blindness (visual impairment after dusk). It protects also bone growth through osteoblasts. The action of Vitamin D3 involves regulating and improving the transformation of calcium and phosphorus in the body. The influence of Vitamin D3 on the proper dental and skeleton growth in young animals during the growing season is especially significant. In case of Vitamin E, the most important activity is the influence on the antioxidant processes in the body, which is visible in the case of cell membrane stability, mainly if they include unsaturated fatty acids. The additional role of Vitamin E in the product is the stabilization of Vitamin A.

**Indications:** Vitamin A, D3 and E deficiency in young animals.

#### **Recommendations for use and Dosage:**

The product is administered in drinking water for all animal species in dosage:

- -Cattle 10-20 ml of the product daily per animal;
- -Calves, fattening pigs, cowered sows and farowing sows 5-10 ml of the product daily per animal;
- -Piglets, dogs, sheep, goats 1-2ml of the product daily per animal;
- -Poultry 2,5 ml per 10 liter of drinking water (100 ml of the mixture per 400 liter of water).

**Special precautions for storage and transportation:** Store below 25°C in a dry and dark place.

# **Special Precautions For the Disposal of Unused Product or Waste Materials Derived from the Use of Such Products:**

Do not empty into drains or with the household waste. The current legal regulations should be observed. This will help protect the environment.

## **MERRI VIT B complex**

#### Premix, sterile product (E. Ph.) of a high quality

#### **Composition:**

100 ml of the product contains:

Dietary additive – vitamins:

Quantity	<b>EUR-Lex</b>	Vitamin
10g of vitamin	3a820	B1 (thiamine HCI)
1g of vitamin	3a	B2 (riboflavin -Na)
		B6 (pyridoxine
1g of vitamin	3a831	hydrochloride)
20mg of vitamin	3a	B12 (cyanocobalamin)
25g of vitamin	3a315	PP (nicotinamid)
		adenosine triphosphate
2,5g		(ATP)

Carrier – water (moisture content – 60,48g).

**Properties:** The product is a long-life sterile solution of ATP and vitamins from the group B. ATP is s biological fuel for the organism. Vitamins form the group B contained in the product play a very important role in the metabolism of carbohydrates, fats and proteins. They are also necessary for the proper functioning of the nervous system, muscle and epithelial tissues.

**Indications:** Fatigue, convalescence, weak growth in young animals, intolerance of transport, travel disturbances, poor health in racing horses and leaping horses.

**Recommendations for use and Dosage:** The product is administered in drinking water for all animal species in dosage:

**cattle, horses** – 20-30 ml of the product daily per animal for 4-5 days; during transport: apply 20 ml 4 hours before transport; **calves, foals**– 4-10 ml of the product daily per animal every 24 hours; **fattening pigs, cowered sows and farrowing sows**- 5-10 ml of the product daily per animal every 24-48 hours; **piglets, dogs, sheep, goats** – 5 ml of the product daily per animal; poultry – 2,5 ml per 10 liter of drinking water (100 ml of the mixture per 400 liter of water).

**NOTE:** Do not apply more than four times with 24-hour intervals.

**Special precautions for storage and transportation:** Store below 25°C in a dry and dark place. Protect from the light.

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## **MERRI VIT B12**

#### **Premix**

Composition: 1 ml of the product contains: (3a) cyanocobalamin (vitamin B12) 500µg, water (moisture content).

Type of packaging: PET bottle with cap of 100 ml.

Properties and action: The product is a long-life sterile solution of vitamin B12. The vitamin contained in the product play a very important role in the metabolism of carbohydrates, fats and proteins. They are also necessary for the proper functioning of the nervous system, muscle and epithelial tissues. Deficiencies of vitamin B12 in animals give the original symptoms arising mainly as a result of the disturbances in the synthesis of nucleic acids and porphyrins, in the transformation of propionic acid in glucose and metabolism of lipids, proteins and cell membranes. Disorders in nucleic acid synthesis and porphyrin lead to anemia, increase white blood cells of multi-piece nucleus and enlarge lymphocytes with leukopenia. The disorder of nucleic acid synthesis reflects clearly the reduction or disappearance of the proliferation of epithelial cells of the gastrointestinal tract, which leads to the present alternating constipation and diarrhoea problems. The participation of vitamin B12 in the transformation of propionic acid in ruminants is very important. Disorder of alternation of propionic acid into glucose results decreased milk production, decreased weight increments, and emaciation. In cattle, this condition can occur as a result of fore stomach microflora disorders (diet change, use of antibiotic ionophores) and high production at the same time. In addition, the protective cobalamin performs the function of the liver protection; it stimulates pancreatic and pituitary secretion.

**Indications:** The preparation shall be applied in the case of vitamins B12 deficiency, especially in the period of intense growth and development and during the treatment with antibiotics.

**Recommendations for use and Dosage:** The product is administered in drinking water for all animal species in dosage: **cattle, horses** – 2-5 ml of the product daily per animal; calves,

foals—1-3 ml of the product daily per animal; **fattening pigs, cowered sows and farrowing sows**, **piglets, dogs, sheep, goats**—0,5-1,5 ml of the product daily per animal; poultry—2,5 ml per 10 liter of drinking water (100 ml of the mixture per 400 liter of water).

**Recommendations for the proper use:** SHAKE BEFORE USE. Read the label to ensure proper use of the product.

#### MERRI VIT E+ SELENIUM

#### Complementary feed, sterile product (E. Ph.) of a high quality

**Composition:** 100 ml of the product contains:

Dietary additive – vitamins: 5,00g of vitamin E ( $\alpha$ - tocopherol)

- trace elements: 0,02g selenium

Technological additives – emulsifiers: 30,50g

Carrier – water (moisture content – 64,45g).

**Properties:** The product is a long-life sterile solution of vitamin E and selenium. The main activity of vitamin E is its influence on antioxidant processes in the organism. It concerns especially the cell membranes stability in the case when they contain unsaturated fatty acids.

**Indications:** This preparation shall be administered especially in young animals in case of deficiency of vitamin E and selenium, which cause dystrophy of skeletal muscle, myocardial degeneration and liver necrosis in piglets.

**Recommendations for use and Dosage:** The product is administered in drinking water for all animal species in dosage:

- **-Horses** 10 ml of the product daily per animal;
- **-Lambs, calves, foals, piglets** 2ml/10kg of body weight;
- -Pigs, sheep— 1ml/10kg of body weight;
- Poultry 2,5 ml per 10 liter of drinking water (100 ml of the mixture per 400 liter of water).

**Special precautions for storage and transportation:** Store below 25°C in a dry and dark place. Protect from the light.

Special Precautions for the Disposal of Unused Product or Waste Materials Derived from the Use of Such Products:

Do not empty into drains or with the household waste. The current legal regulations should be observed. This will help protect the environment.

## **MERRI VIT MINERAL**

#### Complementary feed for cattle, horses, pigs and sheep

**Composition:** 100 ml of the product contains:

**Feed materials:** Calcium Gluconate (11.1.13), magnesium hypophosphite (11.3.21), magnesium chloride (11.2.6), potassium chloride (11.5.1), boric acid.

Feed additives: dietary supplements - trace elements (3b): 1.0 g potassium iodide E2, 0.7 mg zinc E6 (in the form of zinc chloride), 30.9 mg iron E1 (in the form of iron sulphate), 4.4 mg cobalt acetate (3b301); technological additives - preservatives (1a): 1 butanol.

#### **Analytical components:**

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Sodium - 0 g,
Magnesium - 1.3 g,
Phosphorus - 1.6 g,
Calcium - 1.9 g,
Potassium - 0.3 g,
Chlorine - 0.1 g,
Lysine - 0 g,
Methionine - 0 g,
Crude protein - 0%,
Crude oils and fats - 0%,
Crude ash - 0%,
Crude fiber - 0%.
Media - water (moisture content: 78.3 g).
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**Properties and action:** The preparation is a balanced salt solution, recommended for use in horses, cattle, sheep and pigs in disease states, resulting from deficiency of phosphorus, calcium, potassium, magnesium and trace elements: iodine, zinc and cobalt.

**Indications:** The preparation is used adjunctively in horses, cattle, sheep and pigs in disease states, resulting from the deficiency of phosphorus, calcium, potassium, magnesium, sodium and trace elements: iodine, zinc and cobalt. It activates enzymes, hormones, vitamins, cellular metabolism, regulates ion composition and osmotic pressure. The product acts as an auxiliary in disorders in the development and functioning of bone tissue, resulting from mineral deficiencies.

**Dosage and route of administration:** The preparation is used in drinking water in the amount of 1 ml / 5-10 kg bw:

- -Cattle, horses: 10 20 ml / animal;
- -Calves, sheep, pigs: 5-10 ml / animal.

Administer the solution at room temperature slowly, not in one place above 5 ml.

## MERRI VIT MULTIVITAMIN

#### Premix, sterile product (E. Ph.) of a high quality

**Composition:** 100 ml of the product contains:

Dietary additive – vitamins: 1,53Mln I.U. of vitamin A (retinyl palmitate)

120 000 I.U. of vitamin D3 (cholecalciferol)

0.40g of vitamin E ( $\alpha$ - tocopherol)

2,50g of vitamin B1 (thiamine HCI)

0,21g of vitamin B2 (riboflavin -Na)

0,30g of vitamin B5 (calcium pantothenate)

0,125g of vitamin B6 (pyridoxine hydrochloride)

1,25g of vitamin PP (nicotinamide)

0,20g of vitamin C (ascorbic acid)

Technological additives – preservatives: 0,126g

- Emulsifiers: 30,50g

Carrier – water (moisture content – 66,50g).

**Properties:** The product is a long-life sterile solution of vitamins from the group B. Vitamins contained in the product play a very important role in the metabolism of carbohydrates, fats and proteins. They are also necessary for the proper functioning of the nervous system, muscle and epithelial tissues.

**Indications:** The preparation shall be applied in the case of vitamins B deficiency, in the period of intense growth and development, in the nervous system disorders, as well as in the case of the reduction in hatching indicators, feather disorders, cannibalism, and during the treatment with antibiotics and different types of stressful situations.

**Recommendations for use and Dosage:** The product is administered in drinking water for all animal species in dosage:

- -Horses 10 ml of the product daily per animal;
- **-Lambs, calves, foals, piglets** 2ml/10kg of body weight;
- -Pigs, sheep- 1ml/10kg of body weight;
- Poultry 2,5 ml per 10 liter of drinking water (100 ml of the mixture per 400 liter of water).

**Special precautions for storage and transportation:** Store below 25°C in a dry and dark place. Protect from the light.

Special Precautions for the Disposal of Unused Product or Waste Materials Derived from the Use of Such Products: Do not empty into drains or with the household waste. The current legal regulations should be observed. This will help protect the environment.

## **CAL-MAG Mineral Solution**

CAL-MAG Mineral Solution, Complementary feed, Sterile Product (E.Ph.) of a high Quality

#### Composition

1 mL contains:

Dietary additives

Calcium gluconate 380 mg

Magnesium chloride 60 mg

Technological additives- preservatives 1 mg

Carrier- water up to 1 ml

#### **Analytical Constituents**

Calcium 35.3%, Magnesium 7.1%

#### Recommendations For Usage/Dosage

Acute hypocalcemia conditions. As a supporting therapy for allergies, urticaria, hemorrhagic diathesis, uterine inertia. Often accompanied by other metabolic disorders, hypocalcemia frequently occurs in domesticated and farm animals. The conclusive benefits of calcium gluconate are the excellent tissue-tolerance and the inclusion of magnesium protects the animal's heart against any potential cardiotoxic effects caused by calcium.

#### **Target Species Recommended Dosage**

Cattle and Horses: 300 – 500 mL

Sheep, Goats, Foals, Calves, Swine: 30 – 50 mL

Dogs: 5 – 20 mL

Cats: 3 – 5 mL

The product may be given directly to individual animals and to groups of animals via the feed or drinking water to supplement the daily ration to suit the required needs.

#### **Product Properties/Benefits**

**CAL-MAG** is produced in specially designed germ-free clean-rooms with the highest level of quality standards.

#### **Calcium**

- Contributes to bone formation
- Provides a buffering effect (acting as an agent to neutralize excess acidity in
- the rumen)
- Enters into the composition of body fluids (blood)
- Enters into the composition of secretions (hormones, milk)
- Problems due to calcium deficiencies:
- Rickets (crooked limbs, enlarged joints.)

- Milk fever (parturient paresis cause by sudden drops in the blood calcium and
- glucose levels at the start of lactation)
- Reproductive problems

#### Magnesium

- Bone formation
- Cell replication
- Hormone regulation
- Nerve impulse transmission (stress) and muscle contraction
- Fertility
- Resistance to infection (immune system, vitamin E)
- Magnesium plays a vital role in the body's main functions. A regular magnesium
- oxide supply ensures that the forage crops will have the mineral quality required for
- the livestock's healthy diet.
- Problems due to magnesium deficiencies:
- Rickets; caused by mobilization of skeletal Mg2+
- Grass tetany or staggers; spasms caused by a decrease in the Mg2+ concentration
- in the blood
- Thrombosis; clot formations in the blood vessels

#### **Special Warnings**

Wash hands after use. It is advised to refer to the veterinarian before use.

#### **Shelf Life**

Shelf life as packaged for sale: 3 Years.

#### **Special Precautions for Storage and Transportation**

Protect from direct sunlight. Do not freeze. Store at room temperature 15-25 °C and in a dry place.

#### **Nature and Composition of Packaging**

Contained in 500 mL clear polypropylene bottles with a rubber stopper and screw cap.

# Special Precautions for the Disposal of Unused Product or Waste Materials Derived from the Use of Such Products

Do not empty into drains or with the household waste. The current legal regulations should be observed. This will help protect the environment.

#### **Expiry Date and Batch Number:**

#### **Other Information**

For further information about this medicine, please contact us.

## **REVOLYTE**

Complementary Feed-Vitamin, Mineral and Amino Acid Solution

#### **COMPOSITION**

1 mL solution contains:

Dietary additives

3a820	(Thiamine hydrochloride) Vitamin B1	0.10 mg
3a	(Riboflavin sodium phosphate) Vitamin B2	0.04 mg
3a831	(Pyridoxine hydrochloride) Vitamin B6	0.10 mg
3a	(Cyanocobalamin) Vitamin B12	0.05 μg
3a315	(Niacinamide) Vitamin B3	1.5 mg
3a842	(D-panthenol) Vitamin B	0.05 mg
3c321	(L-Lysine monohydrochloride) Lysine	0.03 mg
3c301	DL-methionine	0.01 mg
2b17018	L-phenylalanine	0.03 mg
3c410	L-threonine	0.02 mg
3c440	L-tryptophan	0.01 mg
3c370	L-valine	0.05 mg
3c361	L-arginine	0.025mg
2b17033	L-cysteine	0.01 mg
2b17008	L-histidine	0.01 mg
2b17010	DL-isoleucine	0.01 mg
2b17012	L-leucine	0.04 mg
2b621	Monosodium glutamate	0.04 mg
2b	Phenol	0.1 mg
11.1.6	(Calcium chloride) Calcium	0.23 mg
11.2.2	(Magnesium sulphate heptahydrate) Magnesium	0.29 mg
11.5.1	(Potassium chloride) Potassium	0.20 mg
13.2.2	Dextrose	45.46 mg

Technological additives- preservatives (1a) 1.0 mg, Carrier- water

**ANALYTICAL CONSTITUENTS** 

Moisture content 98.7%, Sugar 4.5%, Calcium 0.008%, Magnesium 0.006%, Potassium 0.036%, Sodium 0.0007%, Crude fat 0.0%, Crude protein 0.02%, Crude fiber 0.2%, Crude ash 0.75 %, Phosphorus 0.0%, Lysine 0.002%, Methionine 0.001%

#### **DIRECTIONS FOR USE**

Recommended to be used as a supportive and preventative supplement in cases of dehydration, electrolyte imbalance and hypoproteinemia which can occur in post-operations, blood loss, diarrhea, shock and exhaustion. Can also be used during period of convalescence. Produced as sterile (E.Ph.) of a high quality.

#### **Animal Species Recommended Usage**

Cattle, Horses, Swine: 500 – 1000 mL

Calves, Sheep, Piglets: 100 - 200 mL

Cats, dogs: 50 – 100 mL

The product may be given directly to individual animals and to groups of animals via the feed or drinking water to supplement the daily ration to suit the required needs. Advised dosages are for 1-2 L of water or 1-2 kg of feed. Recommended usage for poultry is 500 mL product to 500 L of drinking water. It is advised to give to chicks before transportation for prevention of losses.

#### **GENERAL WARNINGS**

Consult your veterinarian before use.

If the additive is administered via water for drinking protein excess should be avoided

Net volume: 500 mL and 1000 mL

**Shelf life:** 3 years from date of production.

#### SPECIAL PRECAUTIONS FOR STORAGE AND TRANSPORTATION

Protect from direct sunlight. Do not freeze. Store at room temperature 15-25 °C and in a dry place. Keep out of reach of children.

#### SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR

#### WASTE MATERIALS DERIVED FROM THE USAGE

Do not empty into drains or with the household waste. The current legal regulations should be observed. This will help protect the environment.

## **CATOPHOS**

#### Complementary Feed Vitamin Mineral Solution

#### **COMPOSITION**

1 mL solution contains:

**Dietary Additives** 

3a (Cyanocobalamin) Vitamin  $B_{12}$  0.05 mg (Sodium dihydrogen 100 mg

11.3.10 (South diffydrogen orthophosphate) Phosphorus

Technological additives- preservatives (1a) 1 mg

Feed materials -propylene glycol (13.11.1) 100 mg, dextrose (13.2.2) 0.5

mg, sodium chloride (11.4.1) 0.09 mg, Carriers- water

#### **ANALYTICAL CONSTITUENTS**

Moisture content 79.75%, Sugar 10.05%, Sodium 1.6%, Potassium 0.026%, Lysine 0.0%, Methionine 0.0%, Crude fat 0.0%, Crude protein 0.0%, Crude fiber 0.0%, Crude ash 0.0%

#### **DIRECTIONS FOR USE**

It is advised to support in cases of acute and chronic metabolic/nutrition disorders, fertility defects, anemia, retarded growth, movement disorders, bone fractures, malnutrition, anemia and fatigue. Also recommended in stress conditions that pose high pressure on the metabolism of the animal, particularly as birth or weaning, transport, change in housing, extreme changes in temperature and in changes of feed. Produced as sterile (E.Ph.) of a high quality.

Animal Species	<b>Recommended Dosage</b>
Horses, cattle	10 – 25 mL
Foals, calves	5 – 12 mL
Sheep, goats, pigs	2.5 – 10 mL
Dogs	0.5 – 5 mL
Cats, rabbits, small rodents	0.5 – 2.5 mL
Feeding via single-space wet-dry feeders (piglets)	0.5 – 1.5 mL/liter
Poultry; feeding via drinking water	0.5 – 1.5 mL/liter

The product may be given directly to individual animals and to groups of animals via the feed or drinking water to supplement the daily ration to suit the required needs. Recommended usage is according to 1 L drinking water and 1 kg feed.

#### GENERAL WARNINGS

Consult your veterinarian before use.

Net volume: 100 mL

**Shelf life:** 3 years from date of production.

#### SPECIAL PRECAUTIONS FOR STORAGE AND TRANSPORTATION

Protect from direct sunlight. Do not freeze. Store at room temperature 15-25 °C and in a dry place. Keep out of reach of children.

## SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS DERIVED FROM THE USAGE

Do not empty into drains or with the household waste. The current legal regulations should be observed. This will help protect the environment.