

Multina Oral Solution

SUMMARY OF PRODUCT CHARACTERISTICS

1 NAME OF THE VETERINARY MEDICINAL PRODUCT

Multina Oral Solution

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Composition :

Each ml Contains:

Vitamin A.....	20,000 IU	Vitamin D3.....	2000IU
Vitamin E.....	8mg	Vitamin K3	12.2mg
Vitamin C.....	10mg	Vitamin B1	3mg
Vitamin B2	2.4mg	Vitamin B6	1.2mg
Vitamin B12.....	15mcg	Nicotinamide	20mg
D-pantothenol.....	0.6mg	Folic Acid.....	0.05mg
D-Biotin.....	0.05mg	DL-Methionine	10mg
L-lysine Hydrochloride.....	2mg	Choline Chloride	2mg
L-Alanine.....	0.65mg	L-Arginine	0.63mg
L-Aspartic Acid	0.85mg	L-Cysteine.....	0.26mg
L-Glutamic Acid.....	1.52mg	L-Glycine.....	0.4mg
L-Histidine	0.23mg	L-Isoleucine.....	0.7mg
L-Leucine	0.95mg	L-Phenylalanine.....	0.69mg
L-Proline	0.41mg	L-Serine	0.75mg
L-Threonine.....	0.48mg	L-Tryptophan	0.16mg
L-Tyrosine	0.45mg	L-Valine	0.84mg

3. PHARMACEUTICAL FORM

Oral Solution

4. CLINICAL INFORMATION

4.1. Target species

Poultry (Broiler and Layer)

4.2. Indications for use specifying the target species

- Prevention and treatment of vitamin deficiency and stress
- Improvement of resistance and against disease
- An aid in the prevention and treatment of disease
- Increase in the number of fertilized eggs and hatchability, and maintenance of that for longer time
- For excellent weight gain the broiler

4.3. Contraindications

None

4.4. Adverse reactions (only in case of overdose)

- **Gastrointestinal Disturbances:** Symptoms such as **diarrhoea, vomiting, loss of appetite,** and **abdominal pain** may be seen in some birds when the solution is overdosed.
- **Renal Stress:** Overdosing certain nutrients, especially vitamins and amino acids, may put stress on the kidneys, particularly in older or already compromised birds.
- **Behavioural Changes:** **Lethargy, reduced activity,** or **poor growth** can occur in cases of overdose, especially with fat-soluble vitamins like Vitamin A or D3.

4.5. Dosage and administration route

Poultry: 1ml per 5 liters of drinking water.

Notes: The medicated water should be used within 24 hours

For drinking water and for administration as needed consecutive days

5. PHARMACOLOGICAL PROPERTIES

- **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 K3:** Absorbed in the small intestine; essential for blood clotting and bone health.
- **Vitamin C:** Absorbed in the small intestine; acts as an antioxidant, supports immune function, and enhances collagen synthesis for feather and skin health.
- **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.
- **Folic Acid:** Absorbed in the small intestine; vital for DNA synthesis, red blood cell formation, and overall growth.
- **D-Biotin:** Absorbed in the small intestine; supports energy metabolism, healthy skin, and feather growth.
- **DL-Methionine:** Absorbed in the small intestine; essential amino acid that aids in protein synthesis, growth, feather pigmentation, and immune function.
- **L-Lysine Hydrochloride:** Absorbed in the small intestine; promotes protein synthesis, growth, and reproductive health.
- **Choline Chloride:** Absorbed in the small intestine; supports liver function, fat metabolism, and nervous system health.
- **L-Alanine:** Absorbed in the small intestine; plays a role in energy production and protein synthesis.
- **L-Arginine:** Absorbed in the small intestine; supports growth, immunity, and nitrogen balance in the body.
- **L-Aspartic Acid:** Absorbed in the small intestine; involved in protein synthesis, energy production, and metabolic processes.

- **L-Cystine:** Absorbed in the small intestine; important for protein synthesis, especially in the formation of keratin for feather growth.
- **L-Glutamic Acid:** Absorbed in the small intestine; supports energy production, protein synthesis, and immune function.
- **L-Glycine:** Absorbed in the small intestine; involved in the synthesis of proteins, collagen, and other important molecules in poultry.
- **L-Histidine:** Absorbed in the small intestine; supports growth, immune system health, and hemoglobin production.
- **L-Isoleucine:** Absorbed in the small intestine; essential for protein synthesis and maintaining muscle tissue.
- **L-Leucine:** Absorbed in the small intestine; critical for protein synthesis, muscle repair, and energy production.
- **L-Phenylalanine:** Absorbed in the small intestine; essential amino acid that supports protein synthesis and growth.
- **L-Proline:** Absorbed in the small intestine; essential for collagen formation and tissue repair.
- **L-Serine:** Absorbed in the small intestine; involved in protein synthesis, metabolism, and neurotransmitter production.
- **L-Threonine:** Absorbed in the small intestine; vital for protein synthesis, immune function, and digestive health.
- **L-Tryptophan:** Absorbed in the small intestine; precursor to serotonin, which supports mood and appetite regulation.
- **L-Tyrosine:** Absorbed in the small intestine; essential for protein synthesis and neurotransmitter production.
- **L-Valine:** Absorbed in the small intestine; crucial for muscle growth, repair, and energy production.

6. 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.

6.1. 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.

6.2 Nature and composition of immediate packaging

100ml PET bottle with pp cap and 1lit HDP Belgian style bottle with induction seal & red colour pp cap.

6.3 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. 058989

9. DATE OF FIRST AUTHORISATION

Date of Reg.: 28-08-2009

10. DATE OF REVISION OF THE TEXT

05-01-2025

MANUFACTURED BY:
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