



**NATIONAL AGENCY FOR FOOD AND DRUG
ADMINISTRATION AND CONTROL (NAFDAC)**

**ANIMAL FEED PREMIX REGISTRATION
REGULATIONS 2023**

**COMMENTS ARE WELCOMED FROM STAKEHOLDERS WITHIN 60
CALENDAR DAYS (ENDING 23RD OCTOBER, 2023).
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Animal Feed Premix Registration Regulations 2023

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**NATIONAL AGENCY FOR FOOD AND DRUG ADMINISTRATION AND CONTROL (CAP
N1 LFN 2004)**

Animal Feed Premix Registration Regulations 2023

Commencement []

In exercise of the powers conferred on the Governing Council of the National Agency for Food and Drug Administration and Control (NAFDAC) by Sections 5 and 30 of the NAFDAC Act Cap N1 LFN 2004 and Section 12 of the Food, Drugs and Related Products (Registration, Etc.) Act Cap F33 LFN 2004 and of all the powers enabling it in that behalf, **THE GOVERNING COUNCIL OF THE NATIONAL AGENCY FOR FOOD AND DRUG ADMINISTRATION AND CONTROL** with the approval of the Minister of Health hereby makes the following Regulations: -

1. Application

These Regulations shall apply to Animal Feed Premix manufactured, imported, exported, advertised, sold, distributed or used in Nigeria.

2. Prohibition:

- a. A person shall not manufacture, import, export, distribute, advertise, display for sale, offer for sale, or distribute Animal Feed Premix in Nigeria unless it has been registered in accordance with the provisions of these Regulations.
- b. Notwithstanding Regulations 2 (1) of this regulation, the National Agency for Food and Drug Administration and Control may grant a permit for the importation Animal Feed Premix above 20 kg pack size, for the purpose of: -
 - (a) registration
 - (b) bulk importation for a farm use only
 - (c) research
 - (d) use in emergency situation from disease outbreak; or
- c. A person to whom a certificate of registration has been issued under these Regulations shall not lend, hire, sell, transfer, or otherwise dispose of the Certificate of Registration to any other person without the approval of the Agency.

3. Application for Registration

- (1) Application for Animal Feed Premix registration shall be made by submitting a completed application form, accompanied by relevant documents as the Agency may, from time to time, and in a man as prescribed by the Agency and shall:-
 - (a) contain the particulars and description of the Animal Feed Premix product, in respect of which the application is made.
 - (b) be accompanied by such fee as the Agency may, from time to time, prescribe.
- (2) The particulars and description of the Animal Feed Premix shall be detailed and consist of all administrative and technical information to allow the Agency to make informed decision on the product
- (3) The Agency, in considering an application: -

- (a) may request the applicant to supply any other information as it may require to enable it reach a decision on the application.
 - (b) shall satisfy itself of the need to register the Animal Feed Premix in Nigeria.
 - (c) may register the Animal Feed Premix product in accordance with the provisions of Food, Drug and Related Products (Registration etc.) Act cap F33 LFN 2004.
- (4) The registration of Animal Feed Premix under these Regulations shall, except cancelled, be valid for a period of five years and may be renewed.
- (5) The Agency shall, from time to time, publish the list of registered Animal Feed Premix on the Agency's official website, notifying the registration of Animal Feed Premix.
- (6) The Agency may refuse an application for registration where:
- (a) the method, facility or control used to manufacture, process and package the Animal Feed Premix is inadequate to consistently preserve and ensure its identity, strength, quality, and purity;
 - (b) the laboratory report for the product is unsatisfactory;
 - (c) the Good Manufacturing Practice inspection report is unsatisfactory;
 - (d) the field trial report is unsatisfactory;
 - (e) product labelling contravenes the extant Animal Feed Premix Labelling Regulations; or
 - (f) any other reason the Agency may deem fit.

4. **Labelling**

The labeling in an Animal Feed Premix shall be in accordance with the Agency's extant Animal Feed Premix Registration Regulations and as may be prescribed by the Agency.

5. **Advertisement**

The advertisement of Animal Feed Premix shall be in accordance with the Agency's extant Animal Feed Premix Advertisement Regulations and as may be prescribed by the Agency.

6. **Trace Minerals and Vitamins Requirements**

Animal feed premix shall be formulated to meet the requirements for animals as specified in the First to Tenth Schedule to these Regulations.

7. **Maximum limits of contaminants**

Animal Feed Premix shall not contain contaminants in amounts and in such a form that shall be harmful to the health of the animals and shall not contain contaminants in excess of the quantity specified in Eleventh to Twelfth Schedule to these Regulations.

8. **Suspension or cancellation of Certificate of Registration**

- (1) The Agency may suspend, withdraw or cancel the certificate of registration of an Animal feed premix where:-
- (a) the grounds on which the Animal Feed Premix is registered is found to be false or incomplete;
 - (b) the circumstances under which the Animal Feed Premix is registered no longer exist;
 - (c) any of the conditions or undertaking under which the Animal Feed Premix is registered is contravened;
 - (d) standard of quality, safety and efficacy as prescribed in the documentation for registration is not complied with;

- (e) the premises in which the Animal Feed Premix is imported, manufactured, packaged or stored by or on behalf of the holder of Certificate of Registration is unsuitable for the import, manufacture, package or storage of the fertilizer; or is not in compliance with the requirements of Good Manufacturing Practice (GMP), as may be determined by the Agency;
 - (f) new information has become available to the Agency which renders the Animal Feed Premix unsafe or dangerous or ineffective;
 - (g) there is an adverse effect on non-target organisms and environment; or
 - (h) the holder of Certificate of Registration notifies the Agency in writing of the intention to suspend the product registration for a period not exceeding the validity of the certificate of registration.
- (2) Where the registration of Animal Feed Premix is suspended or cancelled, the Agency shall order the withdrawal from circulation of that fertilizer and shall cause the suspension, cancellation or withdrawal to be published.
- (3) Pursuant to the provisions in regulations 9(1)(h) of this Regulation, a holder of Certificate of Registration may notify the Agency of the intention to resume marketing of a registered product and shall submit relevant document and pay the prescribed renewal fee for product registration where the product registration certificate has expired.

9. Packaging

- (1) The packaging of an Animal Feed Premix shall be in a manner as approved by the Agency.
- (2) The package of a Animal Feed Premix shall be designed to:-
- (a) maintain the integrity of the Animal Feed Premix under required conditions of storage, display and distribution.
 - (b) permit the withdrawal of some or all of the contents in a manner that is safe to the user.
 - (c) permit the closing of the package in a manner that prevents the spillage of the Animal Feed Premix under required handling conditions.
 - (d) minimize the degradation or change of its contents under required storage conditions.

10. Storage, distribution and display:

- (1) An Animal Feed Premix shall be stored, distributed or displayed in accordance with conditions stated on the label.
- (2) An Animal Feed Premix shall not be stored, distributed or displayed with human food.

11. Disposal

The Holder of Certificate of Registration shall ensure that the disposal of expired, degraded or obsolete Animal Feed Premix shall be carried out in a manner prescribed by the competent authority in the presence of staff of the Agency.

12. Power to seal

The Agency shall have power to seal up any premises used or being used in connection with any offence under these Regulations until such time as the Animal Feed Premix is removed or such reasonable time as the Minister may determine.

13. Penalty.

- (1) Any person who contravenes any of the provisions of these Regulations commits an offence and liable on conviction. In the case of: -
 - (a) an individual, to imprisonment for a term not exceeding one year or to a fine not exceeding N800,000:00 or both,
 - (b) a body corporate, to a fine not exceeding N5,000, 000:00.
- (2) Where an offence under these Regulations is committed by a body corporate, firm or any other association of individuals, every:-
 - (a) director, manager, secretary or other similar officer of the body corporate;
 - (b) partner or officer of the firm;
 - (c) trustee of the body concerned;
 - (d) person concerned in the management of the affairs of the association; or
 - (e) person who was purporting to act in a capacity referred to in paragraphs (a) to (d) of this regulation, commits an offence and liable to be proceeded against and punished in the same manner as if he had himself committed the offence, unless he proves that the act or omission constituting the offence took place without his knowledge, consent or connivance.

14. Forfeiture after conviction

- (1) A person convicted of an offence under these Regulations shall forfeit to the Federal Government-
 - (a) any asset or property constituting proceeds derived from or obtained, directly or indirectly, as a result of the offence; and
 - (b) any of the person's property or instruments used in any manner to commit or to facilitate the commission of the offence.
- (2) In this section, "proceeds" means any property derived or obtained, directly or indirectly, through the commission of the offence.

15. Enforcement of the Regulations

The Agency is exclusively responsible for the enforcement of these Regulations.

16. Interpretation

In these Regulations, unless the context otherwise requires:

“Agency” means the National Agency for Food and Drug Administration and Control;

“Animal Feed Premix” means a uniform mixture of one or more micro ingredients/additives with a diluents and/or carrier to facilitate their even distribution in a larger mix of complete feed.

“Certificate of Registration” means a document describing the particulars and conditions under which a product is registered and indicate the assigned NAFDAC Reg. No. for a product;

“Contaminant” means any substance not intentionally added to feed, which is present in such feed as a result of the production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine), manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food or as a result of environmental contamination.

“Label” means any tag, brand, mark, pictorial or other descriptive matter, written, printed, stenciled, marked, embossed or impressed on, or attached to a package.

“Labelling” includes any written, printed or graphic matter that is present on the label accompanies the product, or is displayed near the product, including promoting its sale or disposal;

Minister means the minister charged by the Federal Government of Nigeria with the responsibility for matters relating to health.

Proceeds means any property derived or obtained, directly or indirectly, through the commission of the offence.

Registered product means a drug or drug related product which has been approved by the Agency and assigned a NAFDAC Reg. No. to be manufactured, imported, exported, sold, distributed or advertised; and

17. Citation

These Regulations shall be cited as the Animal Feed Premix Regulations 2023.

MADE at Abuja thisday of2023.

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**Chairman of the Governing Council
National Agency for Food and Drug Administration and Control (NAFDAC)**

SCHEDULE

FIRST SCHEDULE

[Regulation 7]

Trace Minerals and Vitamins Requirements for Dairy Cattle Per Kg 0.25% Premix

S/N	Parameters	Requirements				
		Calf (0-3months)	Weaner (3-12months)	Yearling/ Heifer (12months to Calving)	Lactating Cow	Dry Cow
1.	Manganese, mg/Kg (min)	8,000	8,000	8,000	8,000	8,000
2.	Zinc, mg/Kg (min)	9,600	9,600	9,600	9,600	9,600
3.	Cobalt, Mg/Kg (min)	40	40	40	40	40
4.	Copper, mg/Kg (min)	4,000	4,000	4,000	4,000	4,000
5.	Iron, mg/Kg (min)	40,000	40,000	40,000	40,000	40,000
6.	Iodine, mg/Kg (min)	40	40	40	40	40
7.	Selenium, mg/Kg (min)	40	40	40	40	40
8.	Vitamin D, IU/Kg (min)	240,000	400,000	400,000	240,000	400,000
9.	Vitamin A, IU/Kg (min)	2,400,000	4,000,000	4,000,000	2,400,000	2,400,000
10.	Vitamin E, IU/Kg (min)	1,200	1,200	1,200	1,200	1,200

SECOND SCHEDULE

[Regulation 7]

Trace Minerals and Vitamins Requirements for Beef Cattle Per Kg 0.25% Premix

S/N	Parameters	Requirements				
		Calf (0-3months)	Weaner (3-12months)	Yearling/ Heifer (12months to Calving)	Lactating Cow	Dry Cow
1.	Manganese, mg/Kg (min)	8,000	8,000	8,000	8,000	8,000
2.	Zinc, mg/Kg (min)	9,600	9,600	9,600	9,600	9,600
3.	Cobalt, Mg/Kg (min)	40	40	40	40	40
4.	Copper, mg/Kg (min)	4,000	4,000	4,000	4,000	4,000
5.	Iron, mg/Kg (min)	40,000	40,000	40,000	40,000	40,000
6.	Iodine, mg/Kg (min)	40	40	40	40	40
7.	Selenium, mg/Kg (min)	40	40	40	40	40
8.	Vitamin D, IU/Kg (min)	240,000	400,000	400,000	240,000	400,000
9.	Vitamin A, IU/Kg (min)	2,400,000	4,000,000	4,000,000	2,400,000	2,400,000
10.	Vitamin E, IU/Kg (min)	1,200	1,200	1,200	1,200	1,200

THIRD SCHEDULE

[Regulation 7]

Trace Minerals and Vitamins Requirements of Broiler Chickens in Premix inclusion Per Ton of Feeds

S/N	Ingredient	Broiler Starter 1 - 10 Days	Growers 11 - 24 Days	Finisher 25 days- Market	Broiler Breeder Starter/ Grower (Pellets) 0- 18 Weeks	Breeder Hen/ Cocks 19 Weeks- End
1.	Vitamin A (IU)	10,000,000 – 15,000,000	10,000,000 – 12,500,000	10,000,000 – 12,500,000	10,000,000 – 12,000,000	12,000,000 – 15,000,000
2.	Vitamin D3 (IU)	2,000,000- 3,000,000	2,000,000- 3,000,000	2,000,000- 3,500,000	2,000,000- 3,000,000	2,000,000- 3,500,000
3.	Vitamin E (mg)	40,000- 50,000	40,000- 50,000	40,000- 50,000	40,000- 60,000	40,000- 75,000
4.	Vitamin K (mg)	2,000- 4,000	2,000- 4,000	2,000- 3,000	2,000- 4,000	2,000- 5,000
5.	Vitamin B1 (mg)	1,500-3,000	1,500-3,000	2,000-3,000	2,000-4,000	2,000-5,000
6.	Vitamin B2 (mg)	5,000- 8,000	5,000- 9,000	5,000- 6,000	5,000- 8,000	9,000- 12,000
7.	Vitamin B6 (mg)	4,000- 6,000	3,200- 6,000	2,200- 4,000	4,000- 6,000	6,000- 7,000
8.	Vitamin B12 (mg)	15- 40	15- 30	11- 25	25- 30	25- 40
9.	Niacin (mg)	40,000- 80,000	60,000- 80,000	40,000- 55,000	30,000- 50,000	40,000- 60,000
10.	Pantothenic Acid (mg)	10,000- 15,000	10,000- 15,000	10,000- 15,000	10,000- 12,000	12,000- 15,000
11.	Folic Acid (mg)	1,000- 2,500	1000- 2500	1000- 2200	1500- 3000	1,500- 4,000
12.	Biotin (mg)	100- 200	100- 200	100- 200	100- 200	100- 200
13.	Vitamin C (mg)					150,000- 200,000
14.	Choline (mg)	300,000- 700,000	300,000- 700,000	300,000- 600,000	300,000- 650,000	250,000- 500,000
15.	Copper (mg)	8000- 10,000	5000- 16,000	5,000- 16,000	8,000- 16,000	10,000- 16,000
16.	Iodine (mg)	800- 1,500	800- 1,500	800- 1,500	800- 1,500	800- 1,500
17.	Iron (mg)	40,000- 90,000	40,000- 90,000	40,000- 90,000	40,000- 90,000	50,000- 90,000
18.	Manganese (mg)	80,000- 120,000	60,000- 120,000	60,000- 120,000	60,000- 120,000	100,000- 120,000
19.	Selenium (mg)	200- 300	150- 300	150- 300	200- 300	250- 300
20.	Zinc (mg)	60,000- 110,000	40,000- 110,000	40,000- 110,000	60,000- 110,000	80,000- 110,000

FORTH SCHEDULE

[Regulation 7]

Trace Minerals and Vitamins Requirements of Layer Chickens in Premix Inclusion Per Ton of Feeds

S/N	Ingredient	Broiler Starter 0-10 Days	Growers 11- 24 Days	Layer 1&2 25- 40 Weeks	Breeding Chicks	Breeder Pullet Grower	Breeding Laying Hens/ Cocks 25- 72 Weeks
1.	Vitamin A (IU)	9,000,000- 13,000,000	9,000,000- 12,000,000	8,000,000- 12,000,000	9,000,000- 13,000,000	9,000,000- 13,000,000	12,000,000- 15,000,000
2.	Vitamin D3 (IU)	2,500,000- 4,000,000	3,000,000- 4,000,000	3,000,000- 4,000,000	2,500,000- 4,000,000	2,500,000- 4,000,000	2,500,000- 4,500,000
3.	Vitamin E (mg)	20,000- 30,000	15,000- 18,000	10,000- 15,000	20,000- 30,000	20,000- 30,000	25,000- 50,000
4.	Vitamin K (mg)	2,000- 3,000	3,000- 3,500	2,000- 3,000	2,000- 3,000	2,000- 3,000	2,000- 4,000
5.	Vitamin B1 (mg)	1,500- 2,500	1,500- 2,200	1,000- 2,500	2,000- 2,500	2,000- 2,500	2,000- 3,000
6.	Vitamin B2 (mg)	4,500- 5,500	5,000- 6,000	5,000- 6,000	4,500- 5,500	4,500- 5,500	9,000- 11,000
7.	Vitamin B6 (mg)	2,500- 5,500	2,500- 4,000	1,500- 5,000	2,500- 5,500	4,500- 5,500	5,000- 6,000
8.	Vitamin B12 (mg)	20- 30	20- 25	10- 22	25- 30	25- 30	25- 30
9.	Niacin (mg)	25,000- 55,000	20,000- 40,000	15,000- 30,000	40,000- 45,000	40,000- 45,000	40,000- 55,000
10.	Pantothenic Acid (mg)	9,000- 16,000	7,000- 12,000	5,000- 10,000	12,000- 16,000	12,000- 16,000	12,000- 20,000
11.	Folic Acid (mg)	1,000- 3,000	700- 1200	700- 1200	1,000- 3,000	1,000- 3,000	1,000- 3,000
12.	Biotin (mg)	100- 200	50- 150	50- 150	100- 250	100- 250	100- 350
13.	Vitamin C (mg)						150,000- 200,000
14.	Choline (mg)	200,000- 400,000	150,000- 300,000	150,000 - 400,000	200,000-400,000	200,000 400,000	250,000-500,000
15.	Copper (mg)	8,000- 12,000	8,000- 9,000	8,000- 9,000	8,000- 9,000	8,000- 9,000	10,000- 12,000
16.	Iodine (mg)	1,000- 1,200	1,000- 1,200	1,000- 1,200	1,000- 1,200	1,000- 1,200	1,000- 1,200
17.	Iron (mg)	40,000- 80,000	40,000- 80,000	40,000- 80,000	40,000- 80,000	50,000- 80,000	50,000- 80,000
18.	Manganese (mg)	80,000- 90,000	80,000- 90,000	80,000- 90,000	100,000- 110,000	100,000-110,000	100,000- 110,000
19.	Selenium (mg)	200- 250	150- 250	150- 250	250- 300	250- 300	250- 300
20.	Zinc (mg)	60-80	60-80	60-80	80- 90	80- 90	80- 90
21.	Cobalt (mg)	300	250	250	250	250	250

FIFTH SCHEDULE

[Regulation 7]

Trace Minerals and Vitamins Requirements of Turkeys in Premix Inclusion Per Ton of Feeds

S/N	Ingredient	Turkey Starter 0 - 8 Weeks	Growers 9- 12 Weeks	Finisher 13- 16 Weeks	Turkey Breeder Starter 0- 6 Weeks	Grower 7- 29 Weeks	Breeding Hens/ Tom 29 Weeks Plus
1.	Vitamin A (IU)	12,000,000- 15,000,000	10,000,000- 12,000,000	8,000,000- 10,000,000	12,000,000- 14,000,000	6,000- 8,000	11,000- 13,000
2.	Vitamin D3 (IU)	4,000,000- 5,000,000	3,000,000- 5,000,000	3,000,000 - 4,000,000	4,000,000- 5,000,000	3,500,000- 4,500,000	4,000,000- 5,000,000
3.	Vitamin E (mg)	75,000- 10,000	50,000- 80,000	30,000- 50,000	50,000- 100,000	50,000- 70,000	100,000- 150,000
4.	Vitamin K (mg)	4,000- 5,000	3,000- 4,000	3,000- 4,000	4,000- 5,000	2,000- 4,000	4,000- 5,000
5.	Vitamin B1 (mg)	4,000- 5,000	3,000- 5,000	3,000- 4,000	4,000- 5,000	1,000- 3,000	4,000- 5,000
6.	Vitamin B2 (mg)	15,000- 20,000	10,000- 15,000	9,000- 10,000	15,000- 20,000	5,000- 10,000	15,000- 20,000
7.	Vitamin B6 (mg)	6,000- 7,000	5,000- 7,000	3,000- 6,000	6,000- 7,000	4,000- 6,000	6,000- 7,000
8.	Vitamin B12 (mg)	40-50	30-40	20-30	40-50	20-30	40-50
9.	Niacin (mg)	100,000- 150,000	80,000- 100,000	60,000- 80,000	100,000- 120,000	50,000- 60,000	80,000- 100,000
10.	Pantothenic Acid (mg)	30,000- 35,000	20,000- 25,000	15,000- 20,000	28,000- 33,000	15,000- 20,000	28,000- 33,000
11.	Folic Acid (mg)	4,000- 6,000	2,000- 3,000	2,000- 2,500	4,000- 6,000	2,000- 3,000	4,000- 6,000
12.	Biotin (mg)	250- 400	250- 300	200- 250	300- 500	200- 500	300- 400
13.	Vitamin C (mg)	100,000- 200,000	100,000- 200,000	100,000- 200,000	100,000- 200,000	100,000- 200,000	100,000- 200,000
14.	Choline (mg)	1,000,000- 1,200,000	500,000- 1,000,000	400,000- 600,000	1,000,000- 1,200,000	800,000- 1,000,000	500,000- 1,000,000
15.	Copper (mg)	8,000- 15,000	8,000- 15,000	8,000- 15,000	8,000- 15,000	8,000- 15,000	8,000- 15,000
16.	Iodine (mg)	1,000- 3,000	1,000- 3,000	1,000- 3,000	1,000- 3,000	1,000- 3,000	1,000- 3,000
17.	Iron (mg)	60,000- 80,000	40,000- 80,000	40,000- 80,000	60,000- 80,000	60,000- 80,000	60,000- 80,000
18.	Manganese (mg)	80,000- 120,000	60,000- 100,000	60,000- 100,000	80,000- 120,000	60,000- 100,000	60,000- 100,000
19.	Selenium (mg)	200- 400	200- 400	200- 400	200- 400	200- 400	200- 400
20.	Zinc (mg)	80,000- 110,000	60,000- 80,000	60,000- 80,000	70,000- 100,000	60,000- 80,000	80,000- 110,000

SIXTH SCHEDULE

[Regulation 7]

Trace Minerals and Vitamins Requirements of Ducks in the Premix Inclusion of One Ton of Feeds

S/N	INGREDIENT	Duck Starter (Pullets)	Rearing (Pullets)	Layer 1	Breeding Ducks	Breeding Pullet Grower	Breeding Laying Ducks/ Drake
1.	Vitamin A (IU)	9000000- 130000000	9000000- 120000000	8000000- 120000000	9000000- 130000000	9000000- 130000000	120000000- 150000000
2.	Vitamin D3 (IU)	2500000- 4000000	3000000- 4000000	3000000- 4000000	2500000- 4000000	2500000- 4000000	2500000- 4500000
3.	Vitamin E (mg)	20000- 30000	15000- 18000	10000- 15000	20000- 30000	20000- 30000	25000- 50000
4.	Vitamin K (mg)	2000- 3000	3000- 3500	2000- 3000	2000- 3000	2000- 3000	2000- 4000
5.	Vitamin B1 (mg)	2000-2500	1500-2200	1000- 2500	2000- 2500	2000- 2500	2500- 3000
6.	Vitamin B2 (mg)	4500- 5500	5000- 6000	5000- 6000	4500- 5500	4500- 5500	6000-11000
7.	Vitamin B6 (mg)	4500- 5500	3000- 4000	3000- 5000	4500- 5500	4500- 5500	4500- 5500
8.	Vitamin B12 (mg)	20- 30	20- 25	20- 22	25- 30	25- 30	25- 30
9.	Niacin (mg)	40000- 55000	20000- 40000	20000- 40000	40000- 45000	40000- 45000	45000- 55000
10.	Pantothenic Acid (mg)	15000- 16000	10000- 12000	7000- 10000	15000- 16000	15000- 16000	15000- 20000
11.	Folic Acid (mg)	1500- 3000	700- 12000	700- 12000	1500- 3000	15000- 3000	2000- 3000
12.	Biotin (mg)	200	100	100	200	200	250- 350
13.	Vitamin C (mg)	100000- 150000	100000- 150000	100000- 200000	100000- 150000	100000- 150000	100000- 200000
14.	Choline (mg)	200000- 400000	200000- 300000	300000- 400000	200000- 400000	200000- 400000	300000- 500000
15.	Copper (mg)	5000- 12000	5000- 9000	5000- 9000	5000- 12000	5000- 9000	5000- 9000
16.	Iodine (mg)	350- 1000	350- 1000	350- 1000	350- 1000	350- 1000	350- 1000
17.	Iron (mg)	60000- 80000	60000- 80000	60000- 80000	60000- 80000	60000- 80000	60000- 80000
18.	Manganese (mg)	56000- 60000	56000- 60000	60000- 70000	56000- 60000	50000- 60000	60000- 70000
19.	Selenium (mg)	150- 250	150- 250	150- 250	150- 250	150- 250	150- 250
20.	Zinc (mg)	40000- 60000	40000- 60000	40000- 60000	40000- 60000	40000- 60000	40000- 60000

SEVENTH SCHEDULE

[Regulation 7]

Trace Minerals and Vitamins Requirements of Geese In Premix Inclusion of One Ton of Feeds

S/N	Ingredient	Geese Starters (Pullets)	Rearing (Pullets)	Layer I	Breeding Ducks	Breeding Pullet Grower	Breeding Laying Geese/ Gander
1.	Vitamin A (IU)	9,000,000-13,000,000	9,000,000-12,000,000	8,000,000-12,000,000	9,000,000-13,000,000	9,000,000-13,000,000	12,000,000-15,000,000
2.	Vitamin D3 (IU)	2,500,000-4,000,000	3000,000 - 4,000,000	3000,000 - 4,000,000	2,500,000 - 4,000,000	2,500,000 - 4,000,000	2,500,000 - 4,000,000
3.	Vitamin E (mg)	20000- 30000	15000- 18000	10000- 15000	20000- 30000	20000- 30000	25000- 50000
4.	Vitamin K (mg)	2000- 3000	3000- 3500	2000- 3000	2000- 3000	2000- 3000	2000- 4000
5.	Vitamin B1 (mg)	2000- 2500	1500- 2200	1000- 2500	2000- 2500	2000- 2500	2500- 3000
6.	Vitamin B2 (mg)	4500- 5500	5000- 6000	5000- 6000	4500- 5500	4500- 5500	6000- 11000
7.	Vitamin B6 (mg)	4500- 5500	3000- 4000	3000- 5000	4500- 5500	4500- 5500	5000- 6000
8.	Vitamin B12 (mg)	20- 30	20- 25	20- 22	25- 30	25- 30	25- 30
9.	Niacin (mg)	40000- 55000	20000- 40000	20000- 40000	40000- 45000	40000- 45000	45000- 55000
10.	Pantothenic Acid (mg)	15000- 16000	10000- 12000	7000- 10000	15000- 16000	15000- 16000	15000- 20000
11.	Folic Acid (mg)	1500- 3000	700- 1200	700- 1200	700- 1200	1500- 3000	2000- 3000
12.	Biotin (mg)	200	100	100	200	200	250- 350
13.	Vitamin C (mg)	100000- 150000	100000- 150000	100000- 200000	100000- 150000	100000- 150000	100000- 200000
14.	Choline (mg)	200000- 400000	200000- 300000	300000- 400000	200000- 400000	200000- 400000	300000- 500000
15.	Copper (mg)	5000- 1200	5000- 9000	5000- 9000	5000- 9000	5000- 1200	5000- 9000
16.	Iodine (mg)	350- 1000	350- 1000	5000- 1200	5000- 1200	5000- 1200	5000- 1200
17.	Iron (mg)	60000- 80000	60000- 80000	60000- 80000	60000- 80000	60000- 80000	60000- 80000
18.	Manganese (mg)	56000- 60000	50000- 60000	60000- 70000	60000-70000	56000- 60000	50000- 60000
19.	Selenium (mg)	150- 250	150- 250	150- 250	150- 250	150- 250	150- 250
20.	Zinc (mg)	40000- 60000	40000- 60000	40000- 60000	40000- 60000	40000- 60000	40000- 60000

EIGHT SCHEDULE

[Regulation 7]

Micro Mineral/Vitamins Requirements of Quails in the Premix Inclusion of one Ton of Feeds

S/N	Ingredient	Quails
1.	Vitamin A (IU)	12,000,000- 13500,000
2.	Vitamin D3 (IU)	3,000,000- 4,000,000
3.	Vitamin E (mg)	50000- 80000
4.	Vitamin K (mg)	2000- 4000
5.	Vitamin B1 (mg)	2000- 4000
6.	Vitamin B2 (mg)	5000- 7000
7.	Vitamin B6 (mg)	4000- 6000
8.	Vitamin B12 (mg)	30- 50
9.	Niacin (mg)	50000- 80000
10.	Pantothenic Acid (mg)	15000- 25000
11.	Folic Acid (mg)	1500- 2000
12.	Biotin (mg)	20- 25
13.	Vitamin C (mg)	100000- 150000
14.	Choline (mg)	400000- 600000
15.	Copper (mg)	5000- 12000
16.	Iodine (mg)	350- 1000
17.	Iron (mg)	60000- 80000
18.	Manganese (mg)	56000- 60000
19.	Selenium (mg)	150- 250
20.	Zinc (mg)	40000- 60000
21.	Cobalt (mg)	250

NINTH SCHEDULE

[Regulation 7]

Vitamins Requirements of Ostrich in The Premix Inclusion of One Ton of Feeds

S/N	Ingredient	Ostrich
1.	Vitamin A (IU)	12,000,000- 16,000,000
2.	Vitamin D3 (IU)	3,000,000- 4,000,000
3.	Vitamin E (mg)	40000- 60000
4.	Vitamin K (mg)	2000- 4000
5.	Vitamin B1 (mg)	3000- 5000
6.	Vitamin B2 (mg)	10000- 20000
7.	Vitamin 6 (mg)	6000- 8000
8.	Vitamin B12 (mg)	50- 100
9.	Niacin (mg)	80000- 100000
10.	Pantothenic Acid (mg)	12000- 20000
11.	Folic Acid (mg)	2000- 4000
12.	Biotin (mg)	20- 35
13.	Vitamin C (mg)	200000- 250000
14.	Choline (mg)	600000- 800000

TENTH SCHEDULE

[Regulation 7]

Micro Mineral/Vitamins Requirements for Catfish and Tilapia at 5kg of Premix Per Ton of Dry Feed

S/N	Parameters	Requirements
1.	Vitamin A (IU/mg)	5,000,000
2.	Vitamin D3 (IU/mg)	2,500,000
3.	Vitamin C (mg)	750,000
4.	Vitamin E (mg)	250,000
5.	Vitamin K3 (mg)	10,000
6.	Vitamin B1 (mg)	5,000
7.	Vitamin B2 (mg)	45,000
8.	Vitamin B6 (mg)	15,000
9.	Vitamin B12 (mg)	45
10.	Niacin (mg)	165,500
11.	Pantothenic (mg)	50,000
12.	Folic Acid (mg)	6,000
13.	Choline (mg)	200,000
14.	Biotin (mg)	12,450
Macro Elements		
15.	Phosphorus % (min)	225
16.	Magnesium % (min)	200
17.	Potassium % (min)	1,300
Micro Elements		
18.	Copper (mg/kg) (min)	25,000
19.	Iodine (mg/kg) (min)	3,000
20.	Iron (mg/kg) (min)	150,000
21.	Manganese (mg/kg) (min)	12,000
22.	Selenium (mg/kg) (min)	1,250
23.	Zinc (mg/kg) (min)	100,000
24.	Anti oxidant (mg/kg) (min)	10,000

ELEVENTH SCHEDULE

[Regulation 8]

Contaminants In Cattle Feed Premix

1. Microbiological

The microbiological contaminants in the Cattle Feed Premix shall be as stated in the table below:

S/N	Parameters	Requirements
1.	Total Viable Count (cfu/g)(max)	1.0 x 10 ⁵
2.	<i>Escherichia Coli</i> (E. Coli)	Absent in 25g
3.	<i>Salmonella spp</i>	Absent in 25g
4.	<i>Staphylococcus aureus</i>	Absent in 25g
5.	Yeast and mould (cfu/g)(max)	1.0 x 10 ²

2. Chemicals

Cattle feed premix shall comply with the maximum limits established by the Codex Alimentarius Commission General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193).

2.1 Mycotoxins

The level of mycotoxins in the Cattle Feed Premix shall be as stated below:

S/N	Parameter	Requirement
1.	Total aflatoxin (ppb) (max)	20

2.2 Pesticide Residue

Codex Maximum Residue Limits for Pesticides and Extraneous Maximum Residue Limits of Pesticides Residues in Food online Database, 2019- General Animal Feed Commodities.

2.3 Metallic

S/N	Parameters	Requirements
1.	Arsenic (As) (mg/Kg)(max)	0.1
2.	Cadmium (Cd) (mg/Kg)(max)	1.0
3.	Lead (Pb) (mg/Kg)(Max)	1.0
4.	Mercury (Hg) (mg/Kg)(max)	0.5

Contaminants in Catfish and Tilapia Feed Premix**1. Microbiological**

The microbiological contaminants in the Catfish and Tilapia Feed Premix shall be as stated in the table below:

S/N	Parameters	Requirements
1.	Total Viable Count (cfu/g)(max)	1.0 x 10 ⁵
2.	<i>Escherichia Coli</i> (E. Coli)	Absent in 25g
3.	<i>Salmonella spp</i>	Absent in 25g
4.	<i>Staphylococcus aureus</i>	Absent in 25g
5.	Yeast and mould (cfu/g)(max)	1.0 x 10 ²

2. Chemicals

Catfish and Tilapia feed premix shall comply with the maximum limits established by the Codex Alimentarius Commission General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193).

2.1 Mycotoxins

The level of mycotoxins in the Catfish and Tilapia Feed Premix shall be as stated below:

S/N	Parameter	Requirement
1.	Total aflatoxin (ppb) (max)	20

2.2 Pesticide Residue

Codex Maximum Residue Limits for Pesticides and Extraneous Maximum Residue Limits of Pesticides Residues in Food online Database, 2019- General Animal Feed Commodities.

2.3 Metallic

S/N	Parameters	Requirements
1.	Arsenic (As) (mg/Kg) (max)	0.1
2.	Cadmium (Cd) (mg/Kg) (max)	1.0
3.	Lead (Pb) (mg/Kg) (Max)	1.0
4.	Mercury (Hg) (mg/Kg) (max)	0.5