

KENYA STANDARD

Dairy Cattle feed premix- Specification

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TECHNICAL COMMITTEE REPRESENTATION

The following organizations were represented on the Technical Committee:

1. Ministry of Livestock Development — Department of Livestock Production
2. Kenya Agricultural Research Institute (KARI)
3. Unga Farm Care EA Ltd.
4. Tamfeeds K Ltd
5. Modern Ways Ltd.
6. Consumer Information Network
7. Department of Veterinary Services
8. AKEFEMA-Association of Kenya Feed Manufacturers
9. Government chemist department.
10. Pioneer Feeds Ltd
11. Nutrimix (K) Ltd
12. Pembe Flour Mills
13. Eaglevet (K) Ltd
14. Joeliz Bone meal Ltd.
15. Proctor and Allan (EA) Ltd
16. Kenya Bureau of Standards — Secretariat

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FOREWORD

This Kenya Standard was prepared by the Animal Feeds Technical Committee under the guidance of the Standards Projects Committee, and it is in accordance with the procedures of the Kenya Bureau of Standards.

Animal mineral and vitamin requirements vary from herd to herd and group to group depending on physiological statuses and seasonality. Appropriate levels of vitamins and minerals impact energy and fat metabolism, immunity, health and lameness, feed intake, and animal productivity. Many factors influence vitamin and mineral availability and utilization.

The animal feed manufacturing industry in Kenya has continued to utilize animal premixes that are either imported whole (ready for use) or locally re-constituted in our factories without clear guidelines on specifications on nutrient requirements for the premixes. In view of the above, it has become necessary to develop standards for animal feed premixes for use in compounding animal feeds in Kenya. It is expected that such an attempt could facilitate increased trade volumes as well as create a vibrant and competitive animal feed manufacturing industry in the region.

During the preparation of this Kenya Standard, reference was made to the following publications:

KS-62-Dairy cattle feed supplements-Specification

The assistance received from these sources is acknowledged with thanks.

KENYA STANDARD

DAIRY CATTLE FEED PREMIX- SPECIFICATION

1. SCOPE

This Kenya Standard specifies requirements for compounded dairy cattle feed premix used in animal feeds.

2. DEFINITIONS

For the purpose of this Kenya Standard, the following definitions shall apply:

2.1 **Premix** is a concentrated mixture of vitamins, trace minerals and diluents. It may contain other feed additives such as amino acids or medicaments.

2.2 **Compound feeds** -: is a mixture of feedstuffs blended from various raw materials and additives as a concentrate that provides part of the ration (energy, protein, trace elements) for dairy cattle.

2.3 **Dairy calves** — Young dairy cattle up to 3 months of age.

2.4 **Weaners**- Young Dairy cattle between age 3 and 8months.

2.5 **Heifers** — Female dairy cattle 8 months up to the point of 1st calving.

2.6 **Mature Dairy cows** —adult female cattle especially bred and kept for milk production, and have calved at least once.

3. REQUIREMENTS

3.1 **Description** —Premix shall be a fine powder, granular or liquid concentrate.

3.2 The Premix shall be free from harmful constituents, metallic objects, adulterants, moulds, pathogenic micro-organisms or insect infestation and free from fermented, musty, rancid or uncharacteristic odour.

3.3 The animal feed premix shall contain the following nutrients.

TABLE OF NUTRIENTS LEVELS FOR DAIRY CATTLE FEED PREMIX

SL No	Nutrients	Requirements
Trace Minerals		
i	Manganese (Min)	20,000mg/Kg
ii	Zinc (Min)	40,000mg/Kg
iii	Cobalt (Min)	100mg/Kg
iv	Copper (Min)	10,000mg/Kg
v	Iodine (Min)	800mg/Kg
vi	Selenium (Min)	10mg/Kg
Vitamins		
i	Vitamin D (IU/Kg) (Min)	2,500,000 I.U.
ii	Vitamin A (IU/Kg) (Min)	10,000,000 I.U.
iii	Vitamin E (IU/Kg) (Min)	62,500 I.U.

NB: i)The above levels must be attained by inclusion at 1kg per metric tonne of feed. Premixes labelled at different inclusion rate must contain a pro rata level of nutrient.

ii)Vitamin B12 may substitute cobalt at a minimum rate of 3000 µg/kg to represent 100 µg/kg of cobalt with no upper limit.

4. PACKAGING AND LABELLING

4.1 Packaging

4.1.1 Dairy cattle feed premix for sale shall be packed in containers which are of sufficient strength and sufficiently sealed so as to withstand reasonable handling without tearing, bursting or falling open during normal handling and transportation.

4.1.2 Each container for feed premix shall be clean and free from visible indications of contamination, infection and insect infestation.

4.2 **Labelling** — the packages shall be securely closed and marked with the following information:

- (i) Name of product;
- (ii) Category of animals for which it is intended;
- (iii) Net Weight of the product;
- (iv) Batch number;

- (v) Name and physical address of the manufacturer;
- (vi) Date of manufacture and expiry
- (vii) Nutrient declaration:-
- (Viii). Instructions for use and storage

5. SAMPLING

For the purpose of determining compliance with this standard, samples of animal feed premixes shall be collected from the market or elsewhere and shall be required to comply with all the requirements of this Kenya Standard.

Public Review Draft