

**Meat and bone meal for compounding
animal feeds-Specification**

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TECHNICAL COMMITTEE REPRESENTATION

The following organizations were represented on the Technical Committee:

Ministry of Livestock Development — Department of Livestock Production
Department of Veterinary Services

Kenya Meat Commission
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Unga Farm Care (EA) Ltd.
Government chemist
Consumer Information Network
Kenya Agricultural Research Institute (KARI)
Proctor and Allan EA Ltd.
AKEFEMA-Association of Kenya Feed Manufacturers
Pembe flour Mills ltd
University Of Nairobi
Kenya Bureau of Standards — Secretariat

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Meat and bone meal for compounding animal feeds-Specification

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P R E F A C E

This Kenya Standard was developed by the Animal Feeds Technical Committee with the guidance of the Standards Project Committee.

Meat and bone meal is derived from mammalian tissue with the exclusion of hair, hoof, horn, manure and pouch contents. It is incorporated in feedstuffs as a protein and mineral supplement. It is prone to contamination with pathogenic organisms, if not properly processed.

Publication of this standard will assist processors and feed manufacturers to exercise proper quality control during production.

In the preparation of this standard, reference was made to the following documents:

Fertilizers and animal feedstuffs Act Cap. 345 of the Laws of Kenya.

Processing and utilization of animal by-products by I. Mann (FAO/UN).

Acknowledgement is made for the assistance derived from these sources.

KENYA STANDARD

Meat and bone meal for compounding animal feeds-Specification

1. SCOPE

This Kenya Standard prescribes minimum requirements for meat and bone meal used in compounding animal feeds for non-ruminants.

2. DEFINITION

Meat and bone meal shall be the rendered product from mammal tissues and bones with the exclusion of blood, hair, hoof, horn, hide trimmings, manure, stomach and rumen contents, except in such amounts as may occur unavoidably in good processing practices.

3. MINIMUM REQUIREMENTS

- 3.1** Meat and bone meal shall be free from rancidity, any objectionable odour, toxic ingredients, adulterants, foreign matter, insects and pathogenic micro-organisms.
- 3.2** It shall be in the form of a powder, whose particle size is such that at least 90 per cent by mass passes through a 1 700-micron (1.7 mm) sieve.
- 3.3** It shall conform to the requirements in Table 1.

TABLE 1. COMPOSITION REQUIREMENTS FOR MEAT AND BONE MEAL

PARAMETER	REQUIREMENT (PER CENT BY MASS)	TEST METHOD (F
Moisture content (max.)	10	KS 01-63: PART 1*
Crude protein (min.)	40	„
Crude fat (max.)	15	„
Calcium (min.)	8	„
Crude fibre (max.)	3	„
Phosphorus (min.)	3	„
Total ash (max.)	35	„
Acid insoluble ash	1	„

*Methods of test for animal feedstuffs.

- NOTES:**
1. The values specified for requirements for calcium and phosphorus are on a moisture free basis.
 2. The calcium level shall be not more than 2.2 times the phosphorus level.

4. Microbiological requirements

4.1 Meat and bone meal shall be free from *salmonellae*, spores of *bacillus anthracis* and clostridia when tested according to the method prescribed in KS 01-63: Part 3*

4.2. Meat and bone meal shall be adequately treated with an antioxidant

5. PACKAGING AND LABELLING

5.1 Packaging

5.1.1 Compounded meat and bone meal 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.

5.1.2 Each container for Compounded meat and bone meal shall be clean and free from visible indications of contamination, infection and insect infestation.

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

- (i) Name of product; 'Meat and Bone Meal';
- (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) Crude protein, calcium, phosphorus and fat contents;
- (Viii). Instructions for use and storage

* Bacteriological tests.