



DRAFT TANZANIA STANDARD

Blood meal for animal feed – Specification

PUBLIC COMMENTS

TANZANIA BUREAU OF STANDARDS

0 Foreword

Blood meal is one of the important animal by-products, which can be used as a protein supplement in animal feeds. It has a great potential in the country if the quality of the material is ensured. Therefore, the preparation of this standard is deemed necessary in order to help both the producers of blood meal as well as the feed manufacturers to produce safe and quality feed products.

In the preparation of this Tanzania standard assistance was derived from IS 7060:1973 – *Specification for blood meal as livestock feed* published by Indian Standards Institution.

In reporting the results of a test or analysis made in accordance with this Tanzania Standard, if the final value observed or calculated is to be rounded off, it shall be done in accordance with TZS 4 (see clause 2).

1.0 Scope

This Tanzania Standard prescribes the requirements, methods of sampling and test for blood meal as protein source in animal feed.

2.0 References

For the purpose of this draft Tanzania Standard, the following references shall apply:

TZS 4 – Rounding off numerical values.

TZS 34-1 – Animal feeds and feeding stuffs – Sampling and test methods Part 1 – general.

TZS 34-3 – Animal feeds and feeding stuffs – Sampling and test methods Part 3 – Microbiological.

TZS 538 – Packaging and labeling of foods

3.0 Terms and definitions

For the purpose of this Tanzania Standard, the following terms and definitions shall apply:

blood meal

dried and ground animal blood to which no other substance matter has been added

4.0 Requirements

4.1 General requirements

4.1.1 Blood meal shall be the product obtained from blood of slaughtered animals and processed by heating at 100 °C for 10-15 minutes and drying with constant agitation, followed by grinding to form coarse powder.

4.1.2 The material shall be free from adulterants, putrefaction, visible insects and fungal infestation.

4.1.3 Blood meal shall also be free from any offensive odour indicative of rancidity or any other objectionable odour.

4.2 Specific requirements

Blood meal shall conform to the requirements prescribed in Table 1.

Table 1: Physico-chemical requirements

S/No.	Characteristics	Requirements	Method of test: TZS 34-1 (see clause 2)
i)	Moisture, <i>percent by mass</i> , max.	8	Clause 4
ii)	Crude protein (N×6.25) <i>percent by mass</i> , min.	80	Clause 5
iii)	Crude fat <i>percent by mass</i> , max.	2	Clause 7
iv)	Total ash, <i>percent by mass</i> , max.	5	Clause 9
v)	Acid insoluble ash <i>percent by mass</i> , max.	0.5	Clause 10

NOTE – Requirements for characteristics ii to v are on moisture free basis.

5.0 Hygiene

5.1 The product shall be prepared under strict hygienic conditions according to TZS 109 (see clause 2).

5.2 Blood meal shall be free from pathogenic microorganisms listed in Table 2.

Table 2: Status for Microbiological limits

S/No.	Pathogen	limits	Method of test
i)	<i>Bacillus anthracis</i> ,	Absent	TZS 34-3
ii)	<i>Clostridium botulinum</i>	Absent	TZS 34-3
iii)	<i>Brucella abortus</i>	Absent	TZS 34-3

iv)	<i>Mycobacterium tuberculosis</i>	Absent	TZS 34-3
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6.0 Sampling and tests

6.1 Sampling

The method of drawing representative samples shall be as prescribed in TZS 34-1 (see clause 2).

6.2 Tests

Tests shall be carried out as prescribed in relevant clauses under Table 1 and 2.

7.0 Packaging, marking and labelling

7.1 Packaging

Blood meal shall be packed in containers that are of sufficient strength, and sufficiently sealed to withstand reasonable handling without tearing, bursting or falling open. The containers shall be clean and not previously used.

7.2 Marking and labelling

In addition to marking and labelling requirements prescribed in TZS 538, Blood meal for each bag shall be legibly and indelibly marked with the following information:

- a) name of the product;
- b) name and address of manufacturer;
- c) net weight in metric unit;
- d) date of manufacture;
- e) batch or code number;
- f) expiry date;
- g) nutritional information;
- h) storage conditions.

7.3 The container may also be marked with TBS Certification Mark.

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