

Dog feeds - Specification

0 FOREWORD

This Tanzania standard lays down specifications aiming at ensuring safety and quality of Dog feeds produced or traded in the country for feeding dogs.

In the preparation of this Tanzania standard, assistance was drawn from IS 11968 – 1986 (Reaffirmed 2001), *Specification for Dog Feeds*; published by Bureau of Indian Standards.

In reporting the results of a test or analysis made in accordance with this 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 SCOPE

This Tanzania standard prescribes the requirements, methods of sampling and test for Dog feeds of all dog categories.

2 REFERENCES

The following referenced standards are indispensable for the application of this draft standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced standard (including any amendments) applies.

TZS 4 – Rounding off numerical values

TZS 34-1 – Animal feeds and feeding stuffs – Sampling and test methods – Part 1: General

TZS 34-2 – Animal feeds and feeding stuffs – Sampling and test methods – Part 2: Minerals and trace elements

TZS 109 – Food Processing units – code of hygiene – General.

TZS 821 – Animal feeds and feeding stuffs – Preparation of test samples.

ISO 6579-1 – Microbiology of food and animal feeding stuffs – Horizontal method for the detection of *Salmonella spp.*

ISO 16654 – Microbiology of food and animal feeding stuffs – Horizontal method for the detection of *Escherichia coli*

ISO 6865 - Animal feeding stuffs - Determination of crude fibre content - Method with intermediate filtration.

3 TERMS AND DEFINITIONS

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

3.1 dog

domesticated carnivorous mammal that typically has a long snout, an acute sense of smell, and a barking, howling, or whining voice widely kept as a pet or for work or field sports.

3.2 feed/feedstuffs

portion of food offered to an animal, usually of a size, materials and combination determined by man.

3.3 food

any edible materials which the animals eat. This material must be ingestible, harmless and beneficial to the animal.

4 REQUIREMENTS

4.1 General requirements

4.1.1 Raw materials

- The ingredients used in the manufacture of Dog feeds are given in Annex A.
- Artificial ingredients, such as antibiotics, hormones or other drugs shall not be used in preparing Dog feeds.

4.1.2 Dog feeds shall;

- be in the form of meal (or mash), crumbs or biscuits.
- be either dry or wet, raw or pre-cooked.
- be free from rancidity, musty odour, toxic ingredients, adulterants, visible mould growth and insect infestation.
- have characteristic fishy and/or meaty odour.

4.2 Specific requirements

Dog feeds shall conform to the requirements prescribed in Table 1, 2 and 3.

Table 1: Physical and chemical requirements – Unit per 100 g dry matter

S/No	Parameter	Requirement		Method of test
		Adult	puppy/ Reproduction	(see clause 2)
i)	Moisture, % m/m, max.	10.0	10.0	TZS 34-1
ii)	Crude protein (N×6.25), %, m/m, min.	18.0	25.0	TZS 34-1
iii)	Crude fat, %, m/m, min.	5.5	8.5	TZS 34-1
iv)	Crude fibre, %, m/m, min.	5.0	4.0	ISO 6865
v)	Crude ash, %, m/m, max.	6.0	6.0	TZS 34-2
vi)	*Calcium, %, m/m, min.	0.50	1.0	TZS 34-2
vii)	*Phosphorus, %, m/m, min.	0.40	0.90	TZS 34-2
viii)	potassium, %, m/m, min.	0.50	0.44	TZS 34-2

ix)	Sodium, %, m/m, min.	0.10	0.22	TZS 34-2
x)	Chloride, %, m/m, min.	0.15	0.33	TZS 34-2
xi)	Magnesium, %, m/m, min.	0.07	0.04	TZS 34-2
Ca / P ratio*		1/1 – 2/1	1/1 – 1.6/1	

Table 2: Trace elements requirement

S/No	Minerals	Requirement		Method of test
		Adult	Puppy /Reproduction	(see clause 2)
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1)	Iron, mg, min.	3.60	8.80	TZS 34-2
ii)	Copper, mg, min.	0.72	1.10	TZS 34-2
iii)	Manganese, mg, min.	0.58	0.56	TZS 34-2
iv)	Zinc, mg, min.	7.20	10.0	TZS 34-2
v)	lodine, mg, min.	0.11	0.15	TZS 34-2
vi)	Selenium, µg, min.	30.0	35.0	TZS 34-2

Table 3: Vitamins requirement

S/No	Vitamins	Requirement		
		Adult	Puppy /Reproduction	
i)	Vitamin A, IU, min.	500	500	
ii)	Vitamin D, IU, min.	50.0	55.2	
iii)	Vitamin E, IU, min.	3.60	5.00	
iv)	Thiamine (B ₁), mg, min.	0.23	0.14	
v)	Riboflavin (B ₂), mg, min.	0.60	0.53	
vi)	Pantothenic acid, mg, min.	1.00	1.50	
vii)	Pyridoxine (B ₆), mg, min.	0.15	0.15	
viii)	Niacin, mg, min.	1.10	1.70	
ix)	Choline, mg, min.	120	170	
x)	Vitamin B _{12,} µg, min.	2.20	3.50	
xi)	Folic acid, µg, min.	18.0	27.0	

5 CONTAMINANTS

5.1 The products covered by this Standard shall comply with the maximum limits for contaminants and Toxins in Food and Feed as established in Codex Stan 193 and the maximum residue limits for pesticides and veterinary drugs established by the Codex committees for pesticides residues and veterinary drug residues for this commodity.

5.2 Aflatoxins

Dog feed shall not have total aflatoxins above 20 mg/kg.

6 HYGIENE

- 6.1 The product shall be prepared under strict hygienic conditions according to TZS 109 (see clause 2).
- 6.2 Dog feed shall comply with microbiological limits as shown in Table 4;

Table 4: Status for microbiological tolerance in animal feeds

S/No.	Microorganism	Status	Test methods (see clause 2)
1.	Salmonella spp	Absent	ISO 6579-1
2.	Escherichia coli	Absent	ISO 16654

7 SAMPLING AND TESTS

7.1 Sampling

Sampling of the product covered under this Standard shall be done according to TZS 34-1, TZS 34-2 and TZS 821 (see clause 2).

7.2 Tests

Testing of this product shall be done according to test methods prescribed in Table 1, 2, 3 and 4 (see clause 2).

8 PACKAGING, MARKING AND LABELLING

8.1 Packaging

Dog feeds shall be packed in clean and sound containers capable of protecting the product from moisture ingress, contamination and spillage during normal handling and transportation. The containers shall be sealed/stitched in a manner that the product will be effectively protected.

8.2 Marking and labelling

- **8.2.1** Dog feed containers shall be marked to display the following information:
 - a) Name of the product "Dog feed";
 - b) Class of Dog "Adult" or "Puppy/Reproduction"
 - c) Name and address of the manufacturer;
 - d) Country of origin
 - e) Batch or code number:
 - f) Date of production;
 - g) Net mass:
 - h) Expiry date;
 - i) Storage conditions;
 - j) Content of crude protein, crude fat and crude fibre;
 - k) Directions for use.
 - Guaranteed analysis

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

NOTE – The TBS Standards Mark of Quality may be used by the manufacturers only under licence from TBS. Particulars of conditions under which the licences are granted may be obtained from TBS.

Annex A (normative)

Dog feed ingredients

The following ingredients may be used in the manufacture of dog feeds:

A.1 Grain products

- Maize flour
- Wheat flour
- Oat flour
- Pollard
- Barley
- Wheat bran
- Wheat germ
- Rice
- Sorghum
- Maize germ meal
- Maize bran

A.2 Animal products

- Bone meal
- Blood meal
- Meat/bone meal
- Meat meal
- Offal meals (treated)
- Dried skimmed milk
- Dry whey
- Cheese meal
- Poultry by-products (excluding manure)
- Hydrolyzed feather meal
- Fishmeal
- Whole milk

A.3 Plant products (other than cereal based)

- Soybean meal
- Alfalfa meal (Lucerne meal) dried grass meal
- Potatoes (solanum tuberosum)

A.4 Industrial by-products

- Sunflower cakes
- Brewer's yeast and dried grains
- Sugarcane molasses

A.5 Other ingredients

- Common salt

- Dicalcium phosphate (fluorine content not to exceed 0.2 %)

