



DRAFT TANZANIA STANDARD

Spiced honey- Specification

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TANZANIA BUREAU OF STANDARDS

0. Foreword

Spiced honey is the product that is prepared by mixing honey with one or more spices such as cinnamon, cardamom, garlic, ginger, lemon grass, mint, black pepper and other spices applied in powder or infusion form.

This Tanzania standard was prepared to ensure the safety and quality of spiced honey produced and/or marketed in Tanzania.

In developing this standard assistance was drawn from manufacturers who provided necessary information and samples.

In reporting the result 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.

1 Scope

This Tanzania Standard specifies requirements, sampling and method of test for spiced honey intended for human consumption.

2 Normative references

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

AFDC 17 (888) CD3, Honey - Determination of ash

AFDC 17 (893) CD3, Honey - Determination of acidity (Titrimetric Method)

AFDC 17 (894) CD3, Honey- Determination of moisture content

Codex Stan 192 General Standard for Food Additives

TZS 109, Food processing units – Code of hygiene

TZS 118, Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of microorganisms – Colony-count technique at 30°C

TZS 122, Microbiology of food and feeding stuffs – Horizontal method for the detection of salmonella spp

TZS 125, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (*Staphylococcus aureus* and other species)

TZS 1502 Fruits, vegetables and derived products – Sampling and methods of test Part 14: Determination of arsenic content - Silver diethyldithiocarbamate spectrophotometric method

TZS 1581, Determination of cadmium content

TZS 2426-1, Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of yeasts and moulds - Part 1: Colony count technique in products with water activity greater than 0.95

TZS 268, General atomic absorption spectrophotometric method for determination of lead in food and food stuffs.

TZS 4, Rounding off numerical values

TZS 538, Labelling of pre-packaged foods — General requirements

TZS 730-2, Microbiology of the food chain — Horizontal method for the enumeration of beta-glucuronidase-positive *Escherichia coli* — Part 1: Colony-count technique at 44 degrees C using membranes and 5-bromo-4-chloro-3-indolyl beta-D-glucuronide

TZS 799, Foodstuffs – Determination of aflatoxin B₁, and the total content of aflatoxins B₁, B₂, G₁ and G₂ in cereals, nuts and derived products – High-performance liquid chromatographic method

TZS 852, Microbiology of food and animal feeding stuffs – Horizontal method for the detection and enumeration of *Listeria monocytogenes*

3. Terms and definitions

For the purposes of this Tanzania standard, the following terms and definitions shall apply.

3.1. honey

natural sweet substance produced by honeybees of genus *Apis* from the nectar of blossoms or from secretions of living parts of plants or excretions of plant sucking insects on the living parts of the plants, which honeybees collect, transform and combine with specific substances of their own, deposit, dehydrate, store and leave in the honey comb to ripen and mature.

3.2. spiced honey

product obtained by mixing honey with spices in powder form or by infusion.

3.3. foreign matter

organic or inorganic material other than Honey or spices .

4. Requirements

4.1 General requirements

4.1.1 Taste and odour of Spiced honey shall be pleasant and characteristic of the designated product. It shall not give rancid taste or must smell and shall be free from adulteration.

4.1.2. Spices used as powder form shall be ground to fineness.

4.1.3 Spiced honey shall be free from extraneous matter, dirt, fungal growth and insect infestation.

4.2 Specific requirements

Spiced honey shall comply with the requirements specified in Table 1, when tested by the specified method.

Table 1- Specific Requirements for Spiced honey

Characteristics	Requirements	Methods of tests
Moisture, Max %	20	AFDC 17 (894)CD3
Acidity, Max meq/Kg	40	AFDC 17 (893)CD3
Total Ash, Max%	0.6	AFDC 17 (888)CD3
Fiehes test	Negative	

5. Food additives

The use of food additives in Spiced honey shall be in accordance with Codex Stan 192.

6. Hygiene

Spiced honey shall be prepared under Good Hygienic Practices as stipulated in TZS 109 and shall comply with the microbiological limits given in Table 2.

Table 2: Microbiological requirement for spiced Honey

S/No	characteristic	Maximum limit	Test method
1	E. coli, cfu/g	Absent	TZS 730-2
2	Yeast/moulds, cfu/g	10 ²	TZS 2426-1
3	Total plate count, cfu/g	10 ³	TZS 118
4	<i>Salmonella</i> spp /25g	Absent	TZS 122
5	<i>Listeria monocytogenes</i> , cfu/g	Absent	TZS 852
6	<i>S. aureus</i> , cfu/g	Absent	TZS 125

7 Contaminants

7.1 Heavy metals

Spiced honey shall not contain any metal contaminants in excess of levels specified in Table 3.

Table 3: Requirements heavy metal in spiced Honey

S/No	Characteristic	Maximum limit (mg/kg)	Method of test
1	Arsenic	0.2	TZS 1502
2	Lead	0.5	TZS 268
3	Cadmium	0.1	TZS 1581

7.2 Pesticides Residues

Spiced honey shall comply with those maximum pesticide residue limits established by the Codex Committee on Pesticide Residues

7.3. Aflatoxin

Spiced honey shall not have more than 5 ppb for Aflatoxin B1 and 10 ppb for total aflatoxin 10 ppb when tested according to TZS 799

8. Sampling and test

8.1. Sampling

Representative sample of the product shall be drawn as prescribed in Annex A.

8.2. Tests

Tests shall be carried out in accordance with the methods prescribed in Table 1, Table 2 and Table 3

8 Packing, marking and labelling

8.1 Packing

Spiced honey shall be packaged in a food grade material that protects the integrity and safety of the product.

8.2 Marking and labelling

8.2.1 In addition to the labelling requirements given in TZS 538, The following particulars shall legibly and indelibly be marked or labeled on each bag/container:

- a) Name of the product" spiced honey "
- b) List of ingredients in order of proportion;
- c) Batch number;
- d) Date of packing and expiry date;
- e) Name, contact and physical address of the manufacturer;
- f) Net weight;
- g) Country of origin;
- h) Storage condition;
- i) Direction for use and
- j) Disposal of used packages.

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Annex A

A.1 General requirements for sampling of Spiced honey

In drawing, preparing, storing and handling of samples, the following precautions and directions shall be observed:

A.1.1. Samples shall be taken in a protected place not exposed to damp air, dust or soot;

A.1.2. The sampling instrument shall be clean and dry when used;

A.1.3. Precautions shall be taken to protect the samples, the material being sampled, the sampling instrument and the containers for samples, from adventitious contamination;

A.1.4. The samples shall be placed in clean and dry glass or food grade plastic containers. The sample containers shall be of such a size that they are almost completely filled by the sample;

A.1.5 Each container shall be sealed airtight after filling and marked with all details of sampling, code number and other important particulars of the consignment;

A.1.6 Samples shall be stored in such a manner that the temperature of the material does not vary unduly from normal temperature.

A.2 Scale of sampling

A.2.1. The number of containers to be sampled from each lot shall depend on the size of the lot and it shall be done according to table 5.

A.2.2. The containers shall be selected at random from the lot.

Lot size (N)	Number of containers to be selected (n)
Up to 25	6
26 – 150	9
151 – 500	12
501 and above	15

A.3 Preparation of sample

Draw with suitable sampling instrument approximately equal quantities of material from different parts of the containers selected as above. These materials shall be mixed together to form a composite sample weighing about 300 g ms. This composite sample shall be divided into two equal parts and transferred to clean and dry containers, sealed air tight and labelled. One of these composite samples is intended for testing and the other for reference.