

**DRAFT TANZANIA STANDARD**

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**Potato flour — Specification**

DRAFT STANDARD FOR COMMENTS ONLY

**TANZANIA BUREAU OF STANDARDS**

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## 0. Foreword

Potato flour is a product produced by grinding fresh ware potato into flour using a milling machine. The demand for this product is increasing thus the need to ensure the safety and quality of potato flour produced and/or marketed in Tanzania.

In the preparation of this draft Tanzania standard assistance was drawn from IS 1318:2017- Indian standard Specification for edible tapioca flour.

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 (See clause 2).

## 1 Scope

This draft Tanzania standard prescribes requirements, methods of sampling and testing for potato flour obtained from potato (*Solanum osum L*) of the family Solanaceae intended for human consumption.

## 2 Normative references

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

TZS 4, Rounding off numerical values

TZS 109, Food Processing units- Code of hygiene

TZS 122-1:2018/ISO 6579-1: 2017 - Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella- Part 1: Detection of *Salmonella spp*

TZS 538:2015 (EAS 38:2014) - Labelling of pre-packaged foods — General requirements

TZS 731: 2018/ ISO 7251: 2006- Microbiology of food and animal feeding stuffs- Horizontal method for the detection and enumeration of presumptive *Escherichia coli*- Most probable number technique

TZS 961:2017 (1st Ed), Starch – Determination of moisture content – Oven-drying method

TZS 1278: 2012 (1st Ed), Fresh potato tuber (ware potato tuber) — Specification

TZS 2044:2017/ISO 5985:2002 Animal feeding stuffs – Determination of ash insoluble in hydrochloric

TZS 2426-1: 2020/ ISO 21527-1: 2008- 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 330: 2017/EAS 900:2017 Cereals and Pulses – Sampling

TZS 2565:2019, Bio fortified sweet potato – Specification

TZS 2473:2019 Animal feeding stuffs - Determination of crude ash

### 3 Terms and definitions

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

#### 3.1 potato

storage tuber obtained from a plant of the species *Solanum osum* L of the family Solanaceae, used for human consumption

#### 3.2 potato flour

flour obtained by milling of sound, peeled, trimmed and dried potatoes as defined under 3.1

#### 3.2 foreign matter

inorganic matter such as sand, glass, metal, stones, clay, mud and organic matter such as chaff, straw, weed seeds, insects or insects fragments, and rodent hairs

#### 3.3 food grade material

material that will not transfer non-food chemicals into the food and contains no chemicals which would be hazardous to human health

### 4 Requirements

#### 4.1 General requirements

4.1.1 Potato flour shall be produced from fresh potato tuber (ware potato tuber) complying with TZS 1278

4.1.2 Potato flour shall be

- a) white to light cream in colour,
- b) free of off-flavours and odours;
- c) practically free from any living and dead insects and
- d) free from foreign matters

#### 4.2 Specific requirements

##### 4.2.1 Quality requirements

Potato flour shall conform to the quality requirements shown in Table 1.

Table 1 —Quality requirements

Analytical characteristic	Requirement	Method of test
Moisture, % by mass, max	13	TZS 961
Ash content, %, by mass, min.	1.8	TZS 2473
Crude fibre, % by mass on dry weight basis, max	2	ISO 5498
Acid insoluble ash, % by mass, max.	0.1	TZS 2044
Particle size for fine flour	100% shall pass through 0.5mm sieve	ISO 3588.
Particle size for medium flour	100% shall pass through 1mm sieve.	

## 5 Contaminants

### 5.1 Pesticide residues

Potato flour shall conform to maximum limits for pesticide residues established by the Codex Alimentarius Commission.

### 5.2 Other contaminants

Potato flour shall comply with the maximum levels of the Codex General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193).

## 6 Hygiene

Potato flour shall be prepared and handled in a hygienic manner in accordance with TZS 102 and shall conform to microbiological limits specified in Table 2.

**Table 2 — Microbiological limits for potato flour**

Micro-organisms	Maximum limit	Method of Test
<i>Escherichia coli</i> , cfu/g,	Absent	TZS 731
<i>Salmonella</i> , per 25g	Absent	TZS 122
Yeast and mould, cfu/g, max.	10 <sup>3</sup>	TZS 2426-1

## 7 Sampling and test

Sampling of potato flour shall be done according to TZS 330 and testing of potato flour shall be done according to test methods prescribed in Tables 1 and 2 of this standard.

## 9 Packing, marking and labelling

### 9.1 Packing

Potato flour shall be packed in suitable food grade materials.

### 9.2 Marking and labelling

In addition to the requirements of TZS 538; the following labeling requirements shall apply and shall be legibly and indelibly marked

- a) the common name of the food product to be declared on the label shall be 'Potato flour;
- b) net weight;

- c) name and physical address of the manufacturer / distributor;
- d) country of origin;
- e) batch number;
- f) date of manufacture and best before date;
- g) the statement 'Human Food' shall appear on the package;
- h) storage conditions 'store in a cool dry place away from contaminants';
- i) instructions on disposal of used package; and
- j) The language on the label shall be Kiswahili and/or English". Another language may be used depending on the designated market.

9.3 The package may also be marked with TBS Quality Mark.

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

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