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DRAFT EAST AFRICAN STANDARD

Pumpkin pulp flour — Specification

EAST AFRICAN COMMUNITY

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Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is Technical Committee EASC/TC 025, *Processed fruits, vegetables and tubers*.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.

Pumpkin pulp flour — Specification

1 Scope

This draft East Africa Standard specifies the requirements, sampling and test methods for pumpkin pulp flour intended for human consumption or for other use in the food industry.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

Codex Stan 192, *General Standard for food additives*

AOAC 999.10, *Determination of Lead, Cadmium, Zinc, Copper and Iron in foods Atomic absorption spectrometry after microwave digestion*

EAS 38, *Labelling for pre-packaged foods — General requirements*

EAS 39, *Hygiene in the food and drink manufacturing industry — Code of practice*

ISO 4833-2, *Microbiology of the food chain — Horizontal method for the enumeration of microorganisms — Part 2: Colony count at 30 degrees C by the surface plating technique*

ISO 6579: *Microbiology of food and feeding stuffs – Horizontal method for the detection of salmonella spp*

ISO 6633, *Fruits, vegetables and derived products — Determination of lead content — Flameless atomic absorption spectrometric method*

ISO 16649-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of beta-glucuronidase-positive Escherichia coli — Part 2: Colony-count technique at 44 degrees C using 5-bromo-4-chloro-3-indolyl beta-D-glucuronide*

ISO 16050: *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*

ISO 21527-1, *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*

ISO 24333, *Cereals and cereal products — Sampling*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

pumpkin pulp

the fresh part of the pumpkin fruit

3.2

pumpkin flour

flour obtained by grinding dried pumpkin pulp into fine powder

4 Requirements

4.1 General requirement

Flour obtained from pumpkin pulp shall

- a) be safe for human consumption
- b) be of natural colour characteristic to the pumpkin pulp variety/cultivar from which it was prepared.
- c) have characteristic odour and taste of pumpkin variety used.
- d) be clean, safe, of good quality and free from signs of spoilage.
- e) be free from insects, larvae, fungal infestation, rodent contamination, dirt and other extraneous matter.

4.2 Specific requirements

Pumpkin pulp flour shall conform to the requirements given in Table 1

Table 1 — Specific for pumpkin flour

S/No	Characteristic	Requirement	Test method
i)	Moisture, % m/m max.	11	EAS: 901
ii)	Total ash, % m/m max.	6	
iii)	Crude fiber, % m/m max.	4	
iv)	Acid insoluble ash, % m/m max.	0.1	
v)	Vitamin A (µg/100 g),min	262	
vi)	Residues through 1000 micron sieve, % m/m max	0.5	

5 Food additives

Food additives when used in pumpkin flour shall be in accordance with CODEX STAN 192.

6 Contaminants

6.1 Heavy metal

Pumpkin flour shall not contain heavy metal contaminants in excess of the limits specified in Table 2 when tested in accordance with the methods specified therein

Table 2 — Heavy metal contaminants limits in pumpkin flour

S/N	Heavy metal	Maximum limit mg/kg	Test method
i.	Lead (Pb)	0.05	ISO 6633
ii.	Cadmium (Cd)	0.05	AOAC 999.10

6.2 Pesticide residues-

The Maximum Residue Limits of pesticides in pumpkin flour shall not exceed levels established in the *Codex online database for pesticide residues in food* for this product.

6.3 Aflatoxins

The maximum content of aflatoxins in pumpkin flour when determined in accordance with the method described in ISO 16050, shall not exceed 5 µg/kg (ppb) for aflatoxin B1 and 10 µg/kg for total aflatoxins.

7 Food additives

Pumpkin pulp flour may contain only permitted additives in accordance with CODEX STAN 192.

8 Hygiene

8.1 Pumpkin pulp flour shall be produced and handled under hygienic conditions in accordance with EAS 39.

8.2 Pumpkin pulp flour shall comply with microbiological limits given in Table 2 when tested in accordance with the methods specified therein

Table 2 — Microbiological limits for pumpkin flour

S/No	Microorganism	Maximum limit	Test method
i)	total plate count cfu/g, max.	10 ⁵	ISO 4833-2
ii)	<i>E.coli</i> cfu/g, max	Absent	ISO 16649-2
iii)	<i>Salmonella</i> per 25g, max.	Absent	ISO 6579-1
iv)	<i>Yeasts and molds</i> cfu/g, max.	10 ³	ISO 21527-1
v)	<i>Staphylococcus</i> , cfu/ g, max.	10	ISO 6888-1

9 Sampling

Sampling of pumpkin flour shall be done in accordance with ISO 24333

10 Packaging

Pumpkin pulp flour shall be packaged in food grade material that ensures the integrity and safety of the product.

11 Labelling

In addition to the requirements of EAS 38, the following specific labelling requirements shall apply and shall be legibly and indelibly marked:

- a) The common name and type of the product, 'Pumpkin pulp flour'.
- b) The name and physical address and or location of the manufacturer
- c) Batch or code number
- d) Date of manufacture/packing
- e) Net weight in SI units
- f) Country of origin
- g) Statement "Human food"
- h) The wording "store in cool dry place"
- i) The statement "use no hooks"
- j) Best before date

Bibliography

- [1] ISO #####-#, *General title — Part #: Title of part*
- [2] ISO #####-##:20##, *General title — Part ##: Title of part*

