# **DRAFT UGANDA STANDARD**

**First Edition** 2021-mm-dd

Cassava wheat composite flour — Specification

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Reference number DUS DEAS 741: 2021

**DUS DEAS 741: 2021** 

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**DUS DEAS 741: 2021** 

## **National foreword**

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The work of preparing Uganda Standards is carried out through Technical Committees. A Technical Committee is established to deliberate on standards in a given field or area and consists of representatives of consumers, traders, academicians, manufacturers, government and other stakeholders.

Draft Uganda Standards adopted by the Technical Committee are widely circulated to stakeholders and the general public for comments. The committee reviews the comments before recommending the draft standards for approval and declaration as Uganda Standards by the National Standards Council.

This Draft Uganda Standard, DUS DEAS 741:2021, Cassava wheat composite flour — Specification, is identical with and is being reproduced from a Draft East African Standard, DEAS 741:2021, Cassava wheat composite flour — Specification, and is proposed for adoption as a Uganda Standard.

The committee responsible for this document is Technical Committee UNBS/TC 2, Food and agriculture.

Wherever the words, "East African Standard" appear, they should be replaced by "Uganda Standard."



#### DRAFT EAST AFRICAN STANDARD

## Cassava wheat composite flour — Specification

PUBLIC PERILEM DRAFT

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#### **DEAS 741:2021**

#### **Foreword**

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

In order to meet the above objectives, the EAC Partner States have enacted an East African Standardization, Quality Assurance, Metrology and Test Act, 2006 (EAC SQMT Act, 2006) to make provisions for ensuring standardization, quality assurance, metrology and testing of products produced or originating in a third country and traded in the Community in order to facilitate industrial development and trade as well as helping to protect the health and safety of society and the environment in the Community.

East African Standards are formulated in accordance with the procedures established by the East African Standards Committee. The East African Standards Committee is established under the provisions of Article 4 of the EAC SQMT Act, 2006. The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. 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 procedures of the Community.

Article 15(1) of the EAC SQMT Act, 2006 provides that "Within six months of the declaration of an East African Standard, the Partner States shall adopt, without deviation from the approved text of the standard, the East African Standard as a national standard and withdraw any existing national standard with similar scope and purpose".

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## 1 Scope

This draft East African Standard specifies the requirements, sampling and test methods for cassavawheat composite flour 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.

EAS 38, General standard for the labelling of pre-packaged foods

EAS 39, Code of practice for hygiene in the food and drink manufacturing industry EAS 900

EAS 738- Fresh sweet cassava-Specification

EAS 778 - Fresh bitter cassava - Specification

EAS 1- Wheat flour - Specification

EAS 51- Wheat grains Specification

EAS 739, Dried cassava chips — Specification

EAS 744, Cassava and cassava products — Determination of total cyanogens — Enzymatic assay method

EAS 82, Milled cereal products — Methods of test (General methods)

ISO 712 Cereals and cereal products — Determination of moisture content — Reference method

ISO 21527-2 Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of yeasts and moulds — Part 2: Colony count technique in products with water activity less than or equal to 0,95

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

ISO 4833-1 Microbiology of the food chain — Horizontal method for the enumeration of microorganisms — Part 1: Colony count at 30 °C by the pour plate technique

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 7305 Milled cereal products — Determination of fat acidity

ISO 5498 Agricultural food products — Determination of crude fibre content — General method

ISO 5986 Animal feeding stuffs — Determination of diethyl ether extract

CODEX STAN 193- Codex general standard for contaminants and toxins in foods

EAS 103, General standard for food additives

EAS 740, Cassava flour - Specification

ISO 16050, Foodstuffs — Determination of aflatoxins  $B_1$  and total content of aflatoxins  $B_1$ ,  $B_2$ ,  $G_1$  and  $G_2$  in cereals, nuts, and derived products — High performance liquid chromatographic method

#### 3 Terms and definitions

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

#### 3.1

## cassava-wheat composite flour

product obtained from milling cassava grits and wheat grains or mixing of cassava flour and wheat flour

#### 3.2.

#### filth

impurities of animal origin (including dead insects)

#### 3.4

#### foreign matter

all organic and inorganic materials (such as sand, soil, glass)

## 4 Requirements

## 4.1 General requirements

- 4.1.1 Cassava wheat composite flour shall be
  - a) homogenous in size and colour;
  - b) free of filth and foreign matter; and
  - c) free from rancid or any off odours or flavours.
- 4.1.2 The cassava wheat composite flour shall be processed from cassava grits/chips/ flour conforming to EAS 738/ EAS 778/EAS 739 respectively and wheat grain/wheat flour conforming to EAS 51 /EAS 1, respectively.

## 4.2 Specific requirements

4.2.1 Cassava wheat composite flour shall conform to requirements in Table 1.

Table 1 — Compositional requirement for cassava wheat composite flour

Characteristic	Requirement	Method of test
Crude fat content, % by mass on a dry weight basis, min.	2.0	ISO 5986
Crude fibre content, % by mass on dry matter basis, max.	1.25	ISO 5498
Acid value	50	ISO 7305
Acid insoluble ash, % by mass, max.	0.35	EAS 82
Moisture content, %, by mass, max.	14	ISO 712

Hydrogen Cyanide, mg/kg, max	10	EAS 744	
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#### 4.2.1 Particle size

Not less than 90 % shall pass through a 0.25 mm sieve for fine flour.

#### 5 Food additives

Food additives may be added to the cassava wheat composite flour in accordance with EAS 103.

#### 6 Contaminants

## 6.1 Pesticide residues

Cassava wheat composite flour shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission for this commodity.

#### 6.2 Other contaminants

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

## 7 Hygiene

Cassava-wheat composite flour shall be prepared and handled in accordance with EAS 39 and shall conform to microbiological limits in specified in Table 2.

Table 2 — Microbiological limits

Micro-organism	Maximum limit	Method of Test
Escherichia. coli, CFU/g	Absent	ISO 16649-2
TPC,CFU/g,max	10 <sup>5</sup>	ISO 4833-1
Salmonella spp per 25 g	Absent	ISO 6579-1
Yeast and mould, CFU/g, max.	10 <sup>4</sup>	ISO 21527-2

## 8 Packaging

The cassava wheat composite flour shall be packaged in materials which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the product.

#### 9 Labelling

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

- a) common name of the product shall be "Cassava wheat composite flour
- b) list of ingredients in descending order of proportion;
- c) net weight
- d) name and physical address of the manufacturer/packer/distributor and /or trade name/ brand name;
- e) lot identification code or in clear mark to identify the producing factory and the lot; and

- f) manufacturing date and expiry date;
- g) storage instructions as 'store in a cool dry place;
- h) instructions on disposal of used package.
- i) declaration of fortification/ use of fortification logo if fortified

## 10 Sampling

Sampling shall be done in accordance with EAS 900.

