

# **DRAFT EAST AFRICAN STANDARD**

Sugar cane jaggery — Specification

EAST AFRICAN COMMUNITY

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## **DEAS 818: 2024**

#### **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.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

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.

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.

DEAS 818 was prepared by Technical Committee EASC/TC 019, Sugar and sugar confectionary.

#### DRAFT EAST AFRICAN STANDARD

## Sugar cane jaggery — Specification

## 1 Scope

This draft East African Standard specifies requirements, methods of test and sampling for sugar cane jaggery

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#### 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.

CXS 192, General standard for food additives

EAS 38 - labelling of pre-packaged foods- General requirements

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

ICUMSA Method GS 2-15 (2007) Determination of Sugar Moisture by Loss on Drying ICUMSA Method GS 1-10 (1998) Determination of Ash in Raw Sugar by Single Sulphation ICUMSA Method GS 8 - 8 (1998 Determination of Insoluble Ash, Calcium, Potassium and Sodium in Beet Pulp

ICUMSA Method GS 2 -19 (2007) Colour in Solution of Sugars, Liquid Sugar and Syrups with less than 50 ICUMSA® Units and with no pH Adjustment

ICUMSA GS 4- 7 (2011) Determination of Total Reducing Sugars in Molasses and Refined Syrups after Hydrolysis by the Lane & Eynon Constant Volume Procedure

ICUMSA GS 4 – 1 (2013) Determination of Apparent Sucrose in Molasses by a Double Polarisation Method

ICUMSA GS 3-50 (2013) Determination of the Total Sugar Content of Invert Sugar Syrups by an HPLC Method

ISO 4833-1, Microbiology food chain — Horizontal method for enumeration for microorganism — Part 1,colony count at 30 degrees C by the pour plate technique ISO 6888-1, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 1: Technique using Baird-Parker agar medium

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

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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

#### 2 Terms and definitions

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

# 3.1 sugar cane jaggery

crystallized product manufactured from juice extracted from the cane stalks (Saccharum spp) andhave not undergone centrifugation to extract molasses

#### 3.2

#### extraneous matter

any material of sugarcane origin such as cane tops and leaves

#### 3.3

#### foreign matter

any material which is not of sugarcane origin for example sand, stones, metallic chips and any organic matterother than extraneous matter

## 3 Requirement

## 4.1. Raw material

Sugar cane jaggery shall be made from clean, filtered, unfermented juice of mature sugar cane stalks.

#### 4.2. General requirements

Sugar cane jaggery shall be free from:

- a) y foreign matter;
- b) any extraneous matter;
- c) any off-flavours and odours; and
- d) insect or fungal infestation.

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## 4.3. Specific requirements

Sugar cane jaggery shall comply with the specific requirements specified in Table 1

Table 1 — Specific quality requirements for sugar cane jaggery

S/ N	Characteristic	Limit	Test method
i	Moisture, % m/m max.	10.0	ICUMSA Method GS 2-15 (2007)
ii	Total ash, % m/m max.	4.0	ICUMSA Method GS 1-10 (1998)
iii	Acid insoluble ash, % m/m max	0.5	ICUMSA Method GS 8 - 8 (1998)
iv	Water insoluble matter, % m/m max	2.0	ICUMSA Method GS 2 -19 (2007)
٧	Reducing sugars, % m/m max	18.0	ICUMSA GS 4- 7 (2011)
vi	Sucrose, % m/m min	60.0	ICUMSA GS 4 – 1 (2013)
vii	Total Sugars % m/m min	78.0	ICUMSA GS 3-50 (2013)

#### 5 Food additives

Only the food additives permitted in CXS 192 shall be used

## 6 Contaminants

## 6.1. Pesticide residues

Sugarcane jaggery shall comply with maximum pesticide residues limits established by the Codex Alimentarius Commission.

# 6.2. Heavy metal

Sugarcane jaggery shall comply with the maximum limits for heavy metals given in CXS 193.

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#### 7 Hygiene

Sugar cane jaggery shall be prepared and handled in accordance to the EAS 39 and shall comply with microbiological limits specified in Table 2.

Table 2 — Microbiological limits for sugar cane jaggery

S/N	Micro-Organism	Limit	Test method
(i)	Total viable plate count, cfu / g, max.	104	ISO 4833 -1
(ii)	Salmonella, spp in 25 g, max	Absent	ISO 6579 - 1
(iii)	Yeast and moulds, cfu / g, max	50	ISO 21527-2
(iv)	E. coli, cfu /r g, max.	Absent	ISO 16649-2
(v)	S. aureus, cfu / g, max	100	ISO 6888-1

## 8 Packaging

Sugar cane jaggery shall be packaged in food grade material which ensures the safety and integrity of the product.

## 9 Weights and measures

The fill of sugar cane jaggery shall comply with weights and measures regulations of Partner States or equivalent legislation.

# 10 Labelling

In addition to requirements in EAS 38 on labelling, the following shall be legibly and indelibly marked on each package:

- name of the product as sugar cane jaggery;
- b) name, address and the physical location of the manufacturer/importer/packer;
- c) brand/trade name;
- d) batch or code number;
- e) net content;
- f) storage instructions;
- g) date of manufacture;

- h) expiry date;
- i) instructions for use;
- j) country of origin;
- k) instructions on disposal of used package; and
- l) list of ingredients.
- m) declaration of any allergens used

## 11 Sampling

sugar cane jaggery shall be sampled in accordance with CXG 50

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