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## DRAFT EAST AFRICAN STANDARD

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Cocoa butter for food industry — 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. XXXXXX.

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 002, Coffee, Cocoa, Tea and related products.

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.

# Cocoa butter for food industry — Specification

## 1 Scope

This Draft East African Standard specifies the requirements, sampling and test methods for cocoa butter for human consumption.

## 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.

DEAS 1030, *Cocoa beans — Specification*

AOAC 960.31, *Fatty acids (water-insoluble) and butyric acid*

AOAC 975.13-, *Unsaponifiable Matter in Cocoa Butter - Ether*

AOAC 999.11, *Determination of Lead, Cadmium, Copper, Iron, and Zinc in Foods, Atomic Absorption Spectrophotometry after Dry Ashing*

Codex Stan 192, *Codex general standard for food additives*

CAC/GL 50; *General guidelines on sampling*

CAC/GL 75, *Guidelines on substances used as processing aids*

EAS 38, *Labelling of pre-packaged foods — Specification*

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

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 16654 *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Escherichia coli O157*

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 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 degrees C by the pour plate technique*

### 3 Terms and definitions

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

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

##### **cocoa butter**

fat obtained from cocoa nib and its derivatives.

#### 3.2

##### **free fatty acids**

substance released due to hydrolysis of triglycerides constituents of cocoa butter which impacts on the quality of the cocoa butter

#### 3.3

##### **unsaponifiable matter**

undesirable substances frequently found dissolved in fat and oils which cannot be saponified by caustic alkalies but soluble in ordinary fat solvents

### 4 Requirements

#### 4.1 Raw material

Cocoa butter shall be made from cocoa beans complying with DEAS 1030

#### 4.2 General requirements

Cocoa butter shall:

- a) be in the form of a paste at room temperature; and
- b) have characteristic colour, taste and flavour of cocoa butter

#### 4.3 Specific requirements

Cocoa butter shall comply with the specific limits given in Table 1 when tested in accordance with the methods specified therein.

**Table 1 — Specific requirements for cocoa-butter**

SL/No	Characteristic	Requirement	Test method
i	Free fatty acids,(expressed as oleic acid) % m/m, max.	1.75	AOAC 960.31
ii	unsaponifiable matter,% m/m,	0.7	AOAC 975.13

	max.	0.35 (for press cocoa butter)	
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## 5 Hygiene

5.1 Cocoa butter shall be prepared and handled in a hygienic manner in accordance with EAS 39.

5.2 Cocoa butter shall comply with the microbiological limits stipulated in Table 2 when tested in accordance with the methods specified therein.

**Table 2 — Microbiological limits for cocoa butter**

S/N	Micro-organism	Maximum limit	Test method
i	<i>Escherichia coli</i> , cfu/ g	Absent	ISO 16649-2
ii	<i>Staphylococcus aureus</i> , cfu/g	Absent	ISO 6888-1
iii	<i>Salmonella spp</i> per 25 g	Absent	ISO 6579-1
iv	Yeast and moulds, cfu/ g	10 <sup>2</sup>	ISO 21527-2
v	Total Plate Count, cfu/g	10 <sup>3</sup>	ISO 4833-1

## 6 Food additives

6.1 No additives are permitted in this product

6.2 Processing aids shall be used and comply with the limit specified in table 3

**Table 3 — Processing aid in cocoa butter**

Processing Aid	Maximum Level
Hexane (62°C -82°C)	1 mg/kg excluding press cocoa butter

6.3 The processing aids used in cocoa butter should be consistent with CAC/GL 75



## 7 Contaminants

Cocoa butter shall not contain heavy metal at levels exceeding the limits stipulated in Table 4, when tested in accordance with the methods stipulated therein.

**Table 4 — Maximum limits for heavy metal contaminants in cocoa butter**

S/N	Heavy metal	Maximum limit mg/kg	Test method
i	Lead (Pb)	0.5	ISO 12193
ii	Cadmium	0.5	AOAC 986.15
iii	Arsenic (As)	0.5	AOAC 986.15

## 8 Pesticide residues

Cocoa butter shall comply with the maximum residual limits for pesticides as established by the Codex Alimentarius online database.

## 9 Packaging

Cocoa butter shall be packaged in food grade materials that secures the integrity and the safety of the product.

## 10 Labelling

In addition to the labelling requirements in EAS 38, name of the product shall be legibly and indelibly marked on the label, as “Cocoa butter”.

## 11 Sampling

Sampling of cocoa butter shall be done in accordance with CAC/GL 50.

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