



DRAFT EAST AFRICAN STANDARD

Chocolate and chocolate products — 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.

Chocolate and chocolate products — Specification

1 Scope

This Draft East African Standard specifies the requirements, sampling and test methods for chocolate and chocolate products 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.

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

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

AOAC 963.15, *Fat in Cacao Products*

AOAC 931.05, *Cacao Mass (Fat-Free) of Chocolate Liquor*

AOAC 945.34, *Fat (Milk) in Milk Chocolate*

AOAC 920.80, *Milk Fat in Milk Chocolate*

AOAC 999.10, *Lead, Cadmium, Zinc, Copper, and Iron in Foods — Atomic Absorption Spectrophotometry after Microwave Digestion*

AOAC 999.11, *Determination of Lead, Cadmium, Copper, Iron, and Zinc in Foods*

AOAC 973.34, *Cadmium in Food*

AOAC 986.15, *Arsenic, Cadmium, Lead, Selenium, and Zinc in Human and Pet Foods*

CODEX STAN 234, *Methods of Analysis and Sampling*

CODEX STAN 192, *General standard for food additives*

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

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 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 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*

3 Terms and definitions

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

- 3.1 chocolate**
homogeneous product obtained from one or more of the following cocoa materials; cocoa nib, cocoa mass, cocoa press cake or cocoa powder and cocoa butter
- 3.2 chocolate products**
include but not limited to the following:
- 3.3 unsweetened chocolate**
chocolate without the addition of sugars
- 3.4 couverture chocolate**
chocolates with high content cocoa butter that may be used as a covering
- 3.5 sweet (plain) chocolate**
chocolate with the addition of sugars
- 3.6 white chocolate**
chocolate confection which does not contain cocoa solids but is made from cocoa butter, sugar, milk solids
- 3.7 chocolate a la Taza**
product obtained from cocoa products, sugars, and flour or starch from wheat, rice or maize,
- 3.8 milk chocolate**
chocolate made of addition of milk ingredients in their natural proportions, except that milk fat may be added, or removed with the addition of sugars and milk solids
- 3.9 milk couverture chocolate**
chocolate with the addition of sugars and milk solids and which is suitable for covering purposes
- 3.10 skimmed milk chocolate**
chocolate with the addition of sugars and skimmed milk solids
- 3.11 skimmed milk couverture chocolate**
chocolate with the addition of sugars and skimmed milk solids and which is suitable for covering purposes
- 3.12 chocolate vermicelli**
chocolate obtained by mixing, extrusion and hardening technique which gives unique, crisp textural properties to the product. With addition of sugars and which is in the form of short, cylindrical grains
- 3.13 chocolate flakes**
chocolate with the addition of sugars and which is in the form of flakes

3.14

milk chocolate vermicelli

chocolate with the addition of sugars and milk solids (and which is in the form of grains)

3.15

milk chocolate flakes

with the addition of sugars and milk solids and which is in the form of flakes

3.16

filled chocolate

product covered by a coating of one or more chocolates, the centre of which is clearly distinct through its composition from the external coating

3.17

praline chocolate

single mouthful size chocolate consisting of either filled, single or combination of chocolates

3.18

cocoa press cake

cocoa mass converted into a cake, which removes a proportion of cocoa butter.

3.19

chocolate para mesa

unrefined chocolate in which the grain size of sugars is larger than 70 microns.

4 Requirements

4.1 Ingredients

4.1.1 Essential ingredients

Chocolates shall be made from the following cocoa materials singly or in combination:

- a) cocoa butter; and
- b) cocoa mass/cocoa cake

4.1.2 Optional ingredients

4.1.2.1 The following materials may be used in chocolate and when used they shall comply with relevant standards

- a) sugar;
- b) milk;
- c) spices; and
- d) any other approved ingredients

4.1.2.2 The addition of vegetable fats other than cocoa butter shall not exceed 5% of the finished product, after deduction of the total weight of any other added edible foodstuffs, without reducing the minimum contents of cocoa materials.

4.2 General requirements

Chocolates shall be;

- a) of colour, flavour and taste characteristic of the chocolate; and
- b) free from moulds, extraneous matter and foreign matter

4.3 Specific requirements

The chocolate and chocolate products shall comply with the specific composition requirements in Table 1.

Table 1 — Specific requirements for chocolate and chocolate products (% on dry matter basis)

PRODUCTS	CONSTITUENTS (en %)						
	Cocoa Butter	Fat-free Cocoa Solids	Total Cocoa Solids	Milk Fat	Total Milk Solids	Starch / Flour	Hazelnuts
1 CHOCOLATE TYPES (COMPOSITION)							
1.1 Chocolate	≥18	≥14	≥35				
1.1.1 Chocolate a la taza	≥18	≥14	≥35			< 8	
1.2 Sweet Chocolat	≥18	≥12	≥30				
1.2.1 Chocolate familiar a la taza	≥18	≥12	≥30			< 18	
1.3 Couverture Chocolate	≥31	≥2.5	≥35				
1.4 Milk Chocolate		≥2.5	≥25	≥2.5-3.5	≥12-14		
2.1.5 Family Milk Chocolate		≥2.5	≥20	≥5	≥20		
1.6 Milk Chocolate couverture		≥2.5	≥25	≥3.5	≥14		
1.7 Other chocolate products							
1.7.1. White Chocolate	≥20			≥2.5-3.5	≥14		
1.7.2 Gianduja Chocolate		≥8	≥32				≥20 and ≤40

1.7.3 Gianduja Milk Chocolate		≥2.5	≥25	≥2.5-3.5	≥10		≥15 and ≤40
1.7.4 Chocolate para mesa							
1.7.4.1 Chocolate para mesa	≥11	≥9	≥20				
1.7.4.2 Semibitter Chocolate para mesa	≥15	≥14	≥30				
1.7.4.3 Bitter Chocolate para mesa	≥22	≥18	≥40				
2 CHOCOLATE TYPES (forms)							
2.1 Chocolate Vermicelli / Chocolate Flakes							
2.1.1 Chocolate Vermicelli / Chocolate Flakes	≥12	≥14	≥32				
2.1.2 Milk Chocolate Vermicelli / Milk Chocolate Flakes		≥2.5	≥ 20	≥3	≥12		
2.2 Filled Chocolate							
2.3 A Chocolate or Praline							

6 Food additives

The use of food additives in chocolate or chocolate products shall comply with the provisions provided in CODEX STAN 192

7 Contaminants

7.1 Pesticide residues

Pesticide residues in chocolate and chocolate products shall not exceed maximum limits as established by the codex online database for pesticide residue in food.

7.2 Heavy metals

Chocolate and chocolate products shall comply with maximum limits for cadmium set in Table 2 when tested in accordance with any of the test methods given therein.

Table 2 — Maximum limits for cadmium in chocolate and chocolate products

S/N	Chocolate/chocolate product	Maximum mg/kg	limits,	Test method
i	Chocolate containing or declaring less than 30% total dry cocoa solids	0.1		AOAC 999.10

ii	Chocolate containing or declaring more than or equal to 30% and less than 50% of dry cocoa solids	0.3	
iii	Chocolate containing or declaring 50 to 70% of total cocoa solids on dry matter basis	0.8	
iv	Chocolate containing or declaring more 70% of total cocoa solids on dry matter basis	0.9	

8 Hygiene

8.1 Chocolate and chocolate products shall be prepared and handled in a hygienic manner in accordance with EAS 39

8.2 Chocolate and chocolate products shall comply with the microbiological limits stipulated in Table 3 when tested in accordance with the methods specified therein.

Table 3 — Microbiological limits for chocolate and chocolate products

SL/No	Micro-organism	Maximum limit	Test method
i.	<i>E Coli</i> , cfu/g	Absent	ISO 16649-2
ii.	<i>Salmonella spp.</i> /25 g	Absent	ISO 6579-1
iii.	Yeast and moulds, cfu/g	10 ²	ISO 21527-2
iv.	Total Viable Count, cfu/g	10 ³	ISO 4833-1

9 Packaging

Chocolate and chocolate products shall be packaged in food grade containers that secure the integrity and safety of the product.

10 Labelling

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

- a) name of the product shall be “Chocolate”
- b) type and form indicating the true nature of the product
- c) proportion of vegetable fat used where applicable; and
- d) list of ingredients in descending order of proportions

11 Sampling

Sampling of chocolates shall be done in accordance with CODEX STAN 234.

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