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DRAFT EAST AFRICAN STANDARD

Cheese — Specification — Cottage cheese

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 017, *Milk and milk 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.

Cheese — Specification — Cottage cheese

1 Scope

This Draft East African Standard specifies the requirements, sampling and test methods for cottage cheese intended for direct consumption and for further processing.

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.

AOAC 999.10, *Determination of Lead, Cadmium, Zinc, Copper, and Iron in foods, Atomic Absorption Spectrophotometry after Microwave Digestion*

CAC/RCP 1, *General principles of food hygiene — Code of practice*

CODEX STAN 192, *General standard for food additives*

CODEX STAN 193, *General standard for contaminants in food and feed*

CODEX STAN 283, *General standard for cheese*

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

ISO 11290-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of Listeria monocytogenes and Listeria SPP — Part 1: Detection method*

ISO 14501, *Milk and milk powder — Determination of aflatoxin M1 content — Clean-up by immunoaffinity chromatography and determination by high-performance liquid chromatography*

ISO 1735, *Cheese and processed cheese products — Determination of fat content — Gravimetric method (Reference method)*

ISO 3433, *Cheese — Determination of fat content — Van Gulik method*

ISO 3727-1, *Butter — Determination of moisture, non-fat solids and fat contents — Part 1: Determination of moisture content (Reference method)*

ISO 3727-2, *Butter — Determination of moisture, non-fat solids and fat contents — Part 2: Determination of non-fat solids content (Reference method)*

ISO 4832, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coliforms — Colony-count technique*

ISO 5534, *Cheese and processed cheese — Determination of the total solids content (Reference)*

ISO 5538, *Milk and milk products — Sampling — Inspection by attributes*

ISO 5738, *Milk and milk products — Determination of copper content — Photometric method (reference method)*

ISO 6611, *Milk and milk products — Enumeration of colony-forming units of yeasts and/or moulds —Colony-count technique at 25 degrees C*

ISO 707, *Milk and milk products — Methods of sampling*

ISO 8197, *Milk and milk products — Sampling — Inspection by variables*

ISO 1664-9, *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*

3 Terms and definitions

No terms and definitions are listed in this document.

4 Product description

4.1 Cottage cheese

Soft, rindless unripened cheese in conformity with the general standard for cheese (CODEX STAN 283) and the standard for unripened cheese including fresh cheese (CODEX STAN 221). The body has a near white colour and a granular texture consisting of discrete individual soft curd granules of relatively uniform size, from approximately 3 mm to 12 mm depending on whether small or large type of curd is desired, and possibly covered with a creamy mixture.

5 Essential composition and quality factors

5.1 Raw materials

Cows' milk or buffaloes' milk, or their mixtures, and products obtained from these milks.

5.2 Essential ingredients

The essential ingredients to be used in cottage cheese shall be as follows:

a) starter cultures of harmless lactic acid and/ or flavour producing bacteria and cultures of other harmless micro-organisms;

b) Rennet or other safe and suitable coagulating enzymes;

c) sodium chloride and potassium chloride as a salt substitute;

5.3 Optional ingredients

a) Gelatin and starches complying with CODEX STAN 273; and

b) safe and suitable processing aids.

6 Requirements

6.1 General requirements

Cottage cheese shall be in conformity with the CODEX STAN 283 and CODEX STAN 221.

6.2 Specific requirements

The compositional requirements and their parameters used in cottage cheese shall be as detailed in Table 1.

Table 1 — Specific requirements for cottage cheese

Milk constituent	Minimum content	Maximum content	Test method
Moisture content, %, m/m	Not restricted	80	ISO 3727-1
Fat free dry matter, %, m/m	18	Restricted by the MFFB (Moisture on fat free basis)	ISO 3727-2
Milk fat, %, m/m	o	Not restricted	ISO 1735

7 Food additives

Food additives may be used in cottage cheese in accordance with CODEX STAN 192.

8 Contaminants

8.1 Veterinary drug and pesticide residues

The milk used in the manufacture of the products covered by this Standard shall comply with the Maximum Levels for contaminants and toxins specified for milk by CODEX STAN 193 and with the maximum residue limits for veterinary drug residues and pesticides established for milk by the CAC/MRL 2.

8.2 Heavy metals

The heavy metal requirements in the product shall comply with the limits in the Table 2.

Table 2 — Maximum limits of heavy metals

S/N	Heavy metal	Limits mg/kg	Test method
i.	Lead	0.02	AOAC 999.10

8.3 Aflatoxins

Aflatoxin M1 shall not exceed 0.5 µg/kg maximum to comply with the levels of contaminants in foods as stipulated in ISO 14501.

9 Hygiene

9.1 It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with CAC/RCP 1, CAC/RCP 57.

9.2 The products shall comply with microbiological limits established in accordance with Table 3.

Table 3 — Microbiological limits

S/N	Microorganism	maximum limit	Test method
i.	Salmonella spp /25g	absent	ISO 6579-1
ii.	Staphylococcus aureus, cfu/g	10^2	ISO 6888-1
iii.	E. coli, cfu/g	absent	ISO 16649-2
iv.	Listeria monocytogenes, /25g	absent	ISO 11290-1
v.	coliforms, cfu/g,	10	ISO 4832
vi.	Yeasts and moulds cfu/g	10	ISO 6611

10 Packaging

The products shall be packaged in food grade containers made of suitable material and shall be well sealed in order to prevent contamination of the contents during storage and transportation.

11 Labelling

In addition to the requirements of EAS 38 the labelling of cottage cheese should include the following:

a) name of product as “Cottage cheese”;

b) name and address of manufacturer;

c) date of manufacture;

d) date of expiry;

e) storage conditions;

f) country of origin;

g) source of milk (cow/buffalo);

h) declaration of Milk fat; and

i) batch number.

12 Sampling

In addition to the provision in ISO 707, sampling shall comply with ISO 8197 or ISO 5538 when the sampling is purposely for inspection.