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# DRAFT EAST AFRICAN STANDARD

Canned corned beef — Specification

# EAST AFRICAN COMMUNITY

Second Edition 2019

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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.

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.

# Canned corned beef — Specification

#### 1 Scope

This Draft East African Standard specifies requirements, methods of tests and sampling for canned corned beef products.

#### 2 Normative reference

CAC/GL 50, General guidelines on sampling

CAC/RCP 58, Code of hygienic practice for meat

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

ISO 7937, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of Clostridium perfringens — Colony-count technique

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

AOAC 950.46, Method for analysis of moisture in meat

AOAC 960.39, Method for analysis of fat in meat

AOAC 992.15, Method for analysis of crude protein in meat and meat products

AOAC 920.153, Method for analysis of ash in meat and meat products

AOAC 985.16, Method for analysis for tin in canned foods

ISO 17294-2, Method for analysis of water quality (elements)

CODEX STAN 192, General standard for food additives

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

EAS 38, Labelling of pre-packaged foods — Specification

ISO 17294-2, Water quality — Application of inductively coupled plasma mass spectrometry (ICP-MS) — Part 2: Determination of 62 elements

ISO 6633, Fruits, vegetables and derived products — Determination of lead content — Flameless atomic absorption spectrometric method

ISO 5961, Water quality — Determination of cadmium by atomic absorption spectrometry

ISO 6637, Fruits, vegetables and derived products — Determination of mercury content — Flameless atomic absorption method

# 3 Terms and definitions

For the purpose of this standard the following definitions apply:

#### 3.1

## 'canned'

in relation to the type of food concerned in this standard, means packaged in a tin or other hermetically sealed container and sterilized after sealing in a vacuumed state

#### 3.2

### premium cut 'canned corned beef'

meat prepared from chopped, cured, boneless carcass meat from animals of bovine species

#### 3.3

#### corned beef

salt-cured beef product

#### 3.4

## canned corned beef

meat prepared from chopped, cured, boneless carcass meat from animals of bovine species and may include head meat, from which the overlying glandular and connective tissues have been removed, heart meat exclusive of heart cap and thick skirt meat excluding thin skirt.

#### 3.5

#### Hermetically sealed container

Means a container which is completely sealed, rigid and impermeable and which is made of any appropriate material, which is suitable for the product, specified in the standard.

## 4 Description

The product shall be prepared from coarsely cut beef which has been pre-cooked or a mixture of such precooked beef to which some raw beef has been added and in either case, the meat shall be cured. The heat treatment shall be applied after the container is sealed and shall be sufficient to ensure that the finished product is shelf-stable and presents no hazard to public health.

## 5 Requirements

#### 5.1 Raw material

The meat shall be inspected and approved as fit for human consumption and shall meet the requirements of EAS 84-1.

#### **5.2 Essential ingredients**

Canned corned beef shall comply with the following requirements:

- i) Fresh beef;
- ii) Curing ingredients consisting of salt (sodium chloride, Sodium or potassium nitrite); and
- iii) Ascorbic acid.

#### 5.3 Optional ingredients

Colourants, emulsifiers, sweeteners and binders may be used as optional ingredients. When used they shall conform to CODEX STAN 192.

#### 5.4 General requirements

**5.4.1** The product shall be clean and substantially free from staining from container.

**5.4.2** The meat shall be uniformly and thoroughly cured with fat evenly distributed throughout the content of the can.

**5.4.3** The product shall be a uniform texture and capable of being sliced at 18 °C.

**5.4.4** The product shall be free from foreign matter, and non-muscular tissues like bones, glands, blood clots, skins, hides and cartilage.

**5.4.5** The product shall satisfy sterility tests.

#### 5.5 Specific requirements

The canned corned beef shall comply with the compositional requirements as specified in table 1 when tested with the methods provided therein.

S/No.	Parameter	Requirement	Test method
i)	Moisture content, % by mass, Max.	63	AOAC 950.46
ii)	Total Fat % by mass, Max.	15	AOAC 960.39
iii)	Total Protein content % by mass, Min.	21	AOAC 992.15
iv)	Total ash content% by mass, Max.	2.5	AOAC 920.153

Table 1 — composition	n of canned	corned beef
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#### 6 Heavy metal contaminants

The maximum level of heavy metal contaminants in canned corned beef shall comply with levels recommended by CODEX STAN 193 as specified in Table 2

S/No.	Contaminants	Maximum limits ppm	Test method
i)	Arsenic (Ar)	0.1	ISO 17294-2
ii)	Lead (Pb)	0.1	ISO 6633
iii)	Cadmium	0.03	ISO 5961
iv)	Mercury	0.01	ISO 6637
v)	Tin	50	AOAC 985.16

Table 2 — Maximum Limits of heavy metals contaminants

# 7 Food additives

Food additives used in canned corned beef shall comply with CODEX STAN 192.

## 8 Hygiene

**8.1** In addition to CAC/RCP 58 the product shall be produced, processed, handled and stored in accordance with EAS 39.

# 8.2 Microbiological limits

The product shall comply with microbiological limits specified in Table 3 below;

S. No	Micro-organism	Max. limits	Test method
i)	Clostridium botulinum, cfu/g	Absent	ISO 7937
ii)	Total plate count, cfu/g	<10	ISO 4833-1

Table 3 — Microbiological limits for canned corned beef

# 9 Labelling

In addition to the requirements of EAS 38, the following labelling requirements shall apply and shall be legibly and indelibly labelled;

- a) Name of the product
- b) List of ingredients
- c) Name of the manufacturer and physical address;
- d) Country of origin;
- e) Batch or code number;
- f) Net weight and gross weight;
- g) Date of production / packaging;
- h) Storage condition; and
- i) Date of expiry.

# 10 Methods of sampling

Shall be in accordance with the provisions of CAC/GL 50.