## **UGANDA STANDARD**

First Edition 2018-mm-dd

**Unsweetened condensed milk — Specification** 



Reference number DUS 1980: 2018 DUS 1980: 2018

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#### **Foreword**

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The work of preparing Uganda Standards is carried out through Technical Committees. A Technical Committee is established to deliberate on standards in a given field or area and consists of key stakeholders including government, academia, consumer groups, private sector and other interested parties.

Draft Uganda Standards adopted by the Technical Committee are widely circulated to stakeholders and the general public for comments. The committee reviews the comments before recommending the draft standards for approval and declaration as Uganda Standards by the National Standards Council.

The committee responsible for this document is Technical Committee UNBS/TC 2, Food and Agriculture, Subcommittee SC 1, [Milk and milk products].

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## Unsweetened condensed milk — Specification

#### 1 Scope

This Draft Uganda Standard prescribes the requirements for unsweetened condensed milks, intended for direct consumption or further processing.

#### 2 Normative references

The following referenced documents 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.

US 45 General standard for food additives

US ISO 6731, Milk, cream and evaporated milk- Determination of total solids content (reference method)

US ISO 8262: Milk products and milk based foods- Determination of fat content by Weibull Berntrop gravimetric Method

US ISO 3727-1; Butter - Determination of moisture, non-fat solids and fat content - Part 1: Determination of moisture content (Reference Method).

US ISO 8851-1; Butter - Determination of moisture, non-fat solids and fat contents (Routine methods) - Part 1: Determination of moisture content.

US CODEX STAN 206, General standard for the use of dairy terms

US ISO 707, Milk and milk products — Guidance on sampling

US ISO 11866-1: Milk and milk products — Enumeration of presumptive Escherichia coli — Part 1: Most probable number technique using 4-methylumbelliferyl-beta-D-glucuronide (MUG)

US ISO 11290-2: Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of Listeria monocytogenes -- Part 2: Enumeration method.

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

US ISO 6611: Milk and milk products – Enumeration of colony-forming units of yeasts and/or moulds – Colony-count technique at 25 C

US ISO 6888-2: Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 2: Technique using rabbit plasma fibrinogen agar medium

US ISO 7937: Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of Clostridium perfringens — Colonycount technique

US EAS 68-2-1: Milk and milk products — Methods for microbiological examination — Part 2-1: Enumeration of coliforms — Colony count technique at 30 °C

US EAS 38; Labelling of pre-packaged foods

US CODEX STAN 193-1995; General Standard for Contaminants and Toxins in Food and Feed

US CAC/MRL 02-2006; Maximum residue limits for veterinary drug residues and pesticides

US EAS 67; Raw cow milk - Specification

#### 3 Terms and definitions

No terms and definitions are listed in this document.

## 4 Product description

4.1 Unsweetened condensed milk (also known as Evaporated milks) are milk products with no added sugar and are obtained by the partial removal of water from whole homogenized milk via evaporation process, or by any other heat process which leads to a product of the same composition and characteristics

The following are the types of evaporated milk prescribed in this standard;

- a) Unsweetened condensed milk
- b) Unsweetened condensed skimmed milk
- c) Unsweetened condensed partly skimmed milk
- d) Unsweetened condensed high-fat milk

### 5 Compositional and quality requirements

#### 5.1 General Requirements

- I. Unsweetened condensed milks:
- II. shall be manufactured from fresh whole milk as defined in US EAS 67, Specification for raw whole milk.
- III. shall be of uniform colour
- IV. Shall have characteristic, caramelized flavour
- V. Shall be free from foreign matter, rancidity and objectionable odours.

#### 5.2 Permitted food ingredients

Ingredients used in production of unsweetened condensed milk shall conform to the relevant standards

#### 5.3 Compositional requirements

Unsweetened condensed milks shall comply with the requirements/limits given in Table 1.

Table 1 — Compositional requirements for Unsweetened condensed milks

Characteristic	Unsweetened condensed milk	Unsweetened condensed skimmed milk	Unsweetened condensed partly skimmed milk	Unsweetened condensed high-fat milk	Methods of Test
Milk Fat % (m/m), min	7.5%	1% (max)	1-7.5%	15%	ISO 8262
Total Milk Solids %, (m/m) min.	25%	20%	20%	11.5%	ISO 6731
Protein in Milk solids not fat %, m/m, min.	34%	34%	34%	34%	AOAC 991.20-23
Titratable Acidity (as lactic acid) per cent (m/m) max	0.41	0.41	0.41	0.41	ISO 11869
Moisture content	27%	28%	27-28%	27-30%	ISO 3727
					ISO 8851

#### 6 Food Additives

Food additives usage shall comply with US 45.

#### 7 Contaminants

The products covered by this Standard shall comply with the Maximum Levels for contaminants and toxins specified for milk by the General Standard for Contaminants and Toxins in Food and Feed (US CODEX STAN 193) and with the maximum residue limits for veterinary drug residues and pesticides (CAC/MRL 02) established for milk by the CAC.

## 8 Hygiene requirements

The products covered by the provision of this standard shall be prepared in accordance US 163 and US 28

## 8.2 Microbiological Requirements

The products covered under this standard shall comply with the microbiological requirements in table 2

Table 3- microbiological Requirements for Unsweetened condensed milk

Microorganism	Requirement	Test method
Escherichia coli per gram	Absent	US ISO 11866-1
Salmonella / 25 g	Absent	US ISO 6579-1
Listeria monocytogene / 25 g	Absent	US ISO 11290-2
Staphylococcus aureaus/ g	Absent	US ISO 6888-2
Clostridium botulinum /g	Absent	US ISO 7937
Yeast and moulds Max /gram	Absent	US ISO 6611
Coliform couts max /gram	Absent	US EAS 68-2-1

## 9 Packaging

Unsweetened condensed milk shall be packed in food contact grade materials conforming to US 1659

## 10 Labelling

In addition to the general provisions of US EAS 38; 'Labelling of pre-packaged foods'; unsweetened condensed milk shall have the following specific provisions:

- i). The name of the product shall be declared in accordance to the composition specified and defined in clause 5.3, as unsweetened condensed milk, Unsweetened condensed skimmed milk, Unsweetened condensed partly skimmed milk, and Unsweetened condensed high-fat milk.
- ii). List of ingredients
- iii). The net volume or net weight
- iv). Name and address of the manufacturer, packer or distributor
- v). Storage instructions
- vi). usage instructions where applicable
- vii). Country of origin where applicable;
- viii). Date of manufacture
- ix). Expiry date
- x). Instructions on disposal of used package.
- xi). Lot identification
- xii). Declaration of GMO status where applicable
- xiii). Declaration of irradiation status where applicable

#### 11 Sampling

Sampling shall be done in accordance to US ISO 707

# **Bibliography**

[1] Kenya draft standard for unsweetened condensed milk.



### **Certification marking**

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ICS 67.100.10

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