
COCOA PRESS CAKE — Specification

Draft African Standard for comments only — Not to be cited as African Standard



Reference No. ARS/CD XXXX:2024(E)
ICS 03.100.70; 67.140.30

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Introduction

This African standard has been developed by Technical Committee TC 06 /WG 1-Cocoa on "Cocoa and related products".

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COCOA PRESS CAKE — Specification

1.0 SCOPE.

This African Standard specifies quality and safety requirements, sampling and test methods, packaging and labelling for cocoa press cake for use in the manufacture of cocoa and chocolate products intended for human consumption.

2.0 NORMATIVE REFERENCE.

The following referenced documents applicable to this African Standard, for dated references only the edition cited applies, for undated references the latest edition of the referenced document (including any amendment) applies.

2.1. CAC/RCP 1 Recommended International Code of Practice - General Principle of Food Hygiene.

2.2. CODEX STAN 234 Recommended Method of Analysis and Sampling

2.3. AOAC Association of Official Analytical Chemists

~~2.4. CAC /STAN 192 — 1995, Rev.2008~~

~~2.5. CAC/GL 36-1989 amended (2009). Codex Alimentarius Commission.~~

~~2.6. CODEX STAN, Volume 11-1994. Codex Alimentarius Commission — Standard for Cocoa Press Cake for use in the manufacture of cocoa and chocolate products.~~

~~2.7. CAC / RM 42-1969, vol. 13,1994 Codex Alimentarius Commission Sampling Plan for Prepackaged Foods—~~

~~2.8-2.4.~~ CODEX STAN 1 – 1985, Rev.6 – 2008. Codex Alimentarius Commission for the Labeling of Prepackaged Foods.

~~2.9. FDA Pre-packaged Foods (Labelling) Regulations (2005).~~

~~2.10. CAC / RS /100 /vol.11 — 2009. Codex Alimentarius Commission — Maximum Residual Limit for Pesticides~~

3.0 Terms and definitions

For the purpose of this Standard, the following terms and definitions shall apply:

3.1

cocoa mass

product obtained by the mechanical disintegration of cocoa nib without removal or addition of any of its constituents

3.2

cocoa nib

~~cocoa beans that have been roasted, separated from their husk and broken into smaller pieces~~
cocoa beans, roasted or unroasted, cleaned, separated from their husk and broken into smaller pieces

3.3

cocoa press cake

product obtained by partial removal of fat from cocoa mass by mechanical means

3.4**cocoa dust or cocoa fines**

fraction of the cocoa bean which is produced as by-product during winnowing and degerming. It consists of a mixture of finely divided nib, shell and germ

3.5**expeller press cake**

~~press cake prepared by the expeller process from cocoa beans of commercial quality and/or cocoa nib, cocoa press cake or cocoa dust or any combination thereof~~

3.63.5**lot**

quantity presumed to be of uniform characteristics taken from a consignment and allowing the quality to be assessed

4.0 INGREDIENTS

Cocoa beans and its derivatives. ~~Cocoa beans.~~

5.0 Food Additives.

Food additives such as Alkalizing agents, Neutralizing agents, Emulsifiers and Flavoring agents are used during production.

Table 1- Food Additives

Alkalizing Agent	Maximum Level (g/kg)
a. Ammonium Carbonate.	50 (singly or in combination, expressed as anhydrous K ₂ CO ₃ on a fat-free basis.)
b. Ammonium Hydroxide.	
c. Ammonium Hydrogen Carbonate	
d. Calcium Carbonate.	
e. Calcium Hydroxide.	
f. Magnesium Carbonate.	
g. Magnesium Hydroxide.	
h. Magnesium Oxide.	
i. Potassium Carbonate.	
j. Potassium Hydroxide.	
k. Potassium Hydrogen Carbonate.	
l. Sodium Carbonate.	
m. Sodium Hydroxide.	
n. Sodium Hydrogen Carbonate.	
o. Citric Acid.	
Neutralizing Agents	Maximum Level (g/kg)
a. Phosphoric acid. (P ₂ O ₃)	2.5
b. Citric acid.	5
c. L-tartaric acid.	5
Emulsifiers	Maximum Level (g/kg)
a. Mono- and diglycerides of edible fatty acids.	15
b. Lecithin.	10
c. Ammonium salts of Phosphatidic acids .	7
d. Total emulsifiers.	15

Flavoring Agents	Maximum Level
a. Natural flavors, as defined in the Codex Alimentarius and their identical synthetic equivalents, other than those which would imitate natural chocolate or milk flavors.	GMP
b. Vanilla.	GMP
c. Ethyl vanillin.	GMP

6.0 QUALITY REQUIREMENTS.

6.1 General Requirements.

6.1.1 Cocoa Press Cake shall be safe and suitable for human consumption.

6.1.2 It shall be free from objectionable taste and flavour.

6.1.3 It shall have odour characteristics of the product.

6.2 Specific Requirements

Cocoa press cake shall comply with the requirements stated in **table 2**

Table 2 – Specific Requirements

PARAMETER	REQUIREMENT
a. Cocoa Shell and Germ. (% max. calculated on fat-free matter)	5
b. Total Ash. (% max. calculated on fat-free matter)	10 to 14 (when treated with permitted alkalizing agents.) <u>10</u> (14 when treated with permitted alkalizing agents)"
c. Acid Insoluble Ash. (% max. on fat-free matter).	0.3
d. Moisture Content. (%) <u>max</u>	4-9
e. Fat Content. (%) <u>max</u>	8-10 – 12

7.0 CONTAMINANTS

7.1 Microbiological

Table 3: Maximum Limits for Microbiological Contaminants

Parameter	Max Limit (cfu/g)
a. Total Viable Count.	10⁴ <u>10,000</u>
b. Yeast / Mould.	400 <u>10² / 10²</u>
c. Coliform.	Absent <u>Nil</u>
d. E.coli.	Absent <u>Nil</u>
e. <u>Enterobacteriaceae</u>	<u>10²</u>
f. <u>Salmonella sp (per 25g)</u>	<u>Absent</u>

7.2 Chemical

7.2.1 Mycotoxin

Cocoa Press Cake shall comply with the Maximum Mycotoxin limit in Table 4:

Table 4 - Mycotoxin Requirements

S/N	Mycotoxin Requirements	Limit
1	Total aflatoxins (ppb) max	<u>410</u>
2	Ochratoxin A (ppb) max	5

7.2.2 Pesticide Residues.

Cocoa Press Cake shall comply with the Maximum Residual Limits (MRLs) for pesticides established by the Codex Alimentarius Commission. CAC/RS/100

7.3 Heavy Metals

Cocoa Press Cake shall comply with the Maximum limits for the under listed heavy metals stated in Table 5.

Table 5. Heavy Metal Requirements

Heavy Metals	Max Limit (mg/kg)
a. Arsenic.	<u>40.1</u>
b. Lead	<u>40.1</u>
c. Cadmium	<u>0.90.6</u>

8.0 HYGIENE.

Cocoa Press Cake shall be produced under Good Manufacturing Practice. The degree of cleanliness shall meet the requirements of relevant Public Health Authorities and it shall be in accordance with the regulations for food hygiene ~~recommended~~ by the ~~FDA and the~~ Recommended International Code of Practice – General Principles of Food Hygiene –CAC / RCP1-1969, Rev.4, 2003.

9.0 PACKAGING AND LABELLING.

9.1 Packaging

Cocoa Press Cake shall be packed in container which shall safeguard its hygiene, nutritional and organoleptic qualities. The product shall be packaged to prevent contamination and spoilage under normal condition of handling, storage, and distribution.

9.1.1 Container

The container shall be filled to a maximum of 90% of full capacity.

9.2 Labelling

In addition to the labelling requirements specified in ARS 56, packages of cocoa press cake shall be labelled legibly and indelibly with the following information

~~The labelling shall meet the requirements on Codex General Standard for the labeling of Prepackaged Foods and Guidelines on Nutrition Labeling as Stipulated in Codex STAN 1-1985, Rev.6-2008.~~

~~The following information shall be declared on the label:~~

- ~~Name of the Product.~~
- ~~List of Ingredients/ Food Additives~~
- ~~Name and Address of Manufacturer~~
- ~~Best Before End Date~~
- ~~Country of Origin.~~

- f. Storage Condition.
~~g. Certification Mark of Quality.~~
~~h. FDA Registration Number.~~

Note- When a product undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purpose of labelling.

10.0 METHOD OF SAMPLING AND ANALYSIS

10.1. Sampling

The product sample shall be taken in compliance with Recommended Method of Analysis and Sampling – CODEX STAN 234-1999 as amended (2007)

Table 6 – Sampling Plan

No of lots (N)	Sample Size (n)	Sample Size for Analysis(n ⁻¹)
Up to 100	2	1
100 – 200	3	2
201 – 350	4	3
301 – 500	5	4
501 and above	6	5

10.2. Method of Analysis.

References of methods of test / analysis are listed in Appendix A – E.

Only internationally accepted methods of analysis from the under listed among others shall apply:

- Codex Alimentarius Commission (CAC) – Recommended Methods of Analysis and Sampling CODEX STAN 234 – 1999 as amended (2007)
- International Union of Pure and Applied Chemistry (IUPAC)
- International Organization for Standardization (ISO)
- Association of Official Analytical Chemists (AOAC)

The applied method of analysis shall be indicated.

10.3. Criteria for Conformity

Cocoa press cake shall be deemed to have complied with the standard quality requirement, if the analyzed representative samples conform to the requirements stipulated in sections 3 – 9.2.

APPENDICES A – E

REFERENCE METHODS OF TEST / ANALYSIS

Appendix A: Determination of Moisture Content.

ISO 72: 1998; ICC: method No. 101/1, Type 1, ICC: method No. 109/1. Type 1.

Appendix B: Determination of Fat Content

ICC: method No.136; AOAC 945. 38F 920.39C

Appendix C: Determination of Acidity Content.

ICC: method No.145; AOAC 939.05

Appendix D: Determination of Ash Content.

AOAC 923.03, ICC method No. 104/1; ISO 2171

Appendix E: Determination of Dietary Fibre Content

ICC: method No.156, ICC; method No. 113; 180