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Banana crisps — Specification



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In order to match with technological development and to keep continuous progress in industries, standards are subject to periodic review. Users shall ascertain that they are in possession of the latest edition

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Foreword

Rwanda Standards are prepared by Technical Committees and approved by Rwanda Standards Board (RSB) Board of Directors in accordance with the procedures of RSB, in compliance with Annex 3 of the WTO/TBT agreement on the preparation, adoption and application of standards.

The main task of technical committees is to prepare national standards. Final Draft Rwanda Standards adopted by Technical committees are ratified by members of RSB Board of Directors for publication and gazettment as Rwanda Standards.

WD xxx was prepared by Technical Committee RSB/TC 038, *Processed fruits and vegetables*.

In the preparation of this standard, reference was made to the following standard (s):

- 1) RS EAS 774, Sweet potato crisps—Specification
- 2) RS EAS 745, Potato crisps—Specification
- 3) RS EAS 743, Cassava crisps—Specification

The assistance derived from the above source is hereby acknowledged with thanks.

Committee membership

The following organizations were represented on the Technical Committee on Processed fruits and vegetables (RSB/TC 038) in the preparation of this standard.

JD LIUAR

National Agricultural Export Development Board (NAEB)

NETRAPI Ltd

Nyarutarama Incubation Center

Shekina Enterprise

TUZAMURANE Cooperative

ZIMA Enterprise

Rwanda Standards Board (RSB) – Secretariat

Banana crisps —Specification

1 Scope

This Draft Rwanda Standards specifies the requirements, sampling and test methods for banana crisps intended 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.

RS CODEX STAN 192, *General standard for food additives*

RS CODEX STAN 193, *Codex general standard for contaminants and toxins in food and feed*

RS EAS 321, *Edible fats and oils — Specification*

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

RS ISO 16649-2, *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*

RS 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*

RS ISO 3960, *Animal and vegetable fats and oils —Determination of peroxide value — Iodometric (visual) endpoint determination*

RS ISO 6579-1, *Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella — Part 1: Detection of Salmonella spp*

3 Terms and definitions

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

3.1

banana crisps

thin slices of peeled and washed banana, deep-fried until crunchy

3.2

foreign matter

organic and inorganic materials (such as sand, soil, glass) other than extraneous matter in the crisps

3.3

extraneous matter

organic matter of banana origin other than banana crisps

3.4

food grade packaging material

packaging material, made of substances which are safe and suitable for their intended use and which will not alter the quality and safety of the product

4 Requirements

4.1 Essential ingredients

The following essential ingredients shall be used in the manufacture of banana crisps and shall comply with relevant standards:

- a) fully mature banana; and
- b) edible oil or fat complying with RS EAS 321.

Note: Using the oil several times may lead to poor quality and may affect the quality of banana crisps

4.2 Optional ingredients

Optional ingredients which may be used in the manufacture of banana crisps shall comply with relevant standards. They include but are not limited to the following:

- a) salt complying with RS EAS 35; and
- b) spices and condiments.

4.3 General requirements

Banana crisps shall:

- a) be crunchy or crispy;

- b) have characteristic colour of the banana variety used;
- c) be free from off-flavours, rancidity, bitter taste or any blemish;
- d) be free from sogginess and excessive oil;
- e) be free from extraneous matter and foreign matter;
- f) be uniform in size and thickness; and
- g) be light yellow to golden brown in colour.

4.4 Defects

4.4.1 Banana crisps shall not contain more than 10% by mass of small pieces, slivers and irregular pieces.

4.4.2 Packaged banana crisps shall have not more than 1% by mass of the crisps with the following defects:

- a) surface or internal pigmentation;
- b) blisters;
- c) callous areas; and
- d) black specks and spots.

4.5 Specific requirements

Banana crisps shall comply with the specific requirements given in Table 1 when tested in accordance with test methods specified therein.

Table 1—Specific requirements for Banana crisps

S/N	Characteristic	Requirements	Test method
i.	Moisture, % by mass, max.	4.5	AOAC 934.06
ii.	Fat content on dry weight basis, %, by mass, max.	20.0	AOAC 963.15
iii.	Free fatty acids on dry weight basis, %, max.	0.5	
iv.	Sodium chloride (NaCl) on dry weight basis, %, max.	2.0	
v.	Acid insoluble ash, %, by mass, max	0.05	RS ISO 5985
vi.	Peroxide value, meq oxygen per gram max.	0.5	RS ISO 3960

5 Food additives

Food additives which may be used in the manufacture of Banana crisps shall comply with RS CODEX STAN 192.

6 Hygiene

6.1 Banana crisps shall be manufactured and handled in accordance with the hygienic requirements stipulated in RS CAC/RCP 1.

6.2 Banana crisps shall not exceed the microbiological limits in Table 2 when tested in accordance with test methods specified therein.

Table 2 — Microbiological limits for Banana crisps

S/N	Microorganisms	Limit	Test method
i.	Total Plate Count, cfu/g max.	10 ³	RS ISO 4833-1
ii.	<i>Escherichia coli</i> , cfu/ g max.	Absent	RS ISO 16649-2
iii.	<i>Salmonella spp</i> in 25 g max.	Absent	RS ISO 6579-1
iv.	Yeasts and moulds, cfu/g, max.	10 ²	RS ISO 21527-2

7 Contaminants

7.1 Pesticides residues

Banana crisps shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

7.2 Other contaminants

Banana crisps shall comply with the maximum levels of the Codex General Standard for Contaminants and Toxins in Food and Feed RS CODEX STAN 193.

8 Packaging

8.1 Banana crisps shall be packaged in food grade materials which will safeguard the hygienic, nutritional, technological, and organoleptic qualities of the product.

8.2 The packaging material shall comply with the environmental legislation of the destination country.

9 Labelling

9.1 In addition to the requirements of RS EAS 38, the following specific labelling requirements shall be legibly and indelibly marked:

- a) name of the product shall be "Banana crisps";
- b) if spiced, the product shall be labelled as "Spiced banana crisps";
- c) name, location and address of the manufacturer; packer and/or distributor;
- d) date of manufacture;
- e) best before date;
- f) country of origin;
- g) list of ingredients;
- h) net content;
- i) lot/ batch number;
- j) if used, food additives shall be declared;
- k) declaration stating "salted" or "unsalted";
- l) declaration of flavouring agent or spice used;
- m) storage conditions;
- n) instructions for use; and
- o) instructions on disposal of used package.

9.2 When labelling non-retail packages, information for non-retail packages shall either be given on the packages or in accompanying documents, except that the name of the product, lot identification and the name and address of the manufacturer or packer shall appear on the packages.

10 Sampling

Sampling of banana crisps shall be done in accordance with RS ISO 24333.

Annex A
(normative)

Annex title

A.1

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Annex B
(informative)

Bibliography

[1]

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