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Vegetable powder — Specification

PUBLIC REVIEW

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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.

DRS 448 was prepared by Technical Committee RSB/TC 038 on *Processed fruits and vegetables*.

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

- 1) R448448448— 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.

Rwanda Standards Board (RSB) – Secretariat

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Vegetable powder — Specification

1 Scope

This Draft Rwanda Standard specifies the requirements, sampling and test methods for vegetable powder intended for human consumption.

It does not apply to any vegetable powder/flour which is a subject of standard designated by a specific name.

2 Normative references

The following referenced documents are indispensable for the application 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.

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

CODEX STAN 228, *General method of analysis for contaminants*

ISO 1026, *Fruit and vegetable products — Determination of dry matter content by drying under reduced pressure and of water content by azeotropic distillation*

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*

ISO 6541, *Agricultural food products — Determination of crude fibre content — Modified Scharrer method*

RS EAS 82, *Milled cereal products — Methods of test (General methods)*

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 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*

RS ISO 5498, *Agricultural food products — Determination of crude fibre content — General method*

RS ISO 6579, *Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella — Part 1: Detection of Salmonella spp. — Amendment 1: Broader range of incubation temperatures, amendment to the status of Annex D, and correction of the composition of MSRV and SC*

RS ISO 6888-1, *Microbiology of the food chain — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 1: Technique using Baird-Parker agar medium*

RS ISO 763, *Fruit and vegetable products — Determination of ash insoluble in hydrochloric acid*

3 Terms and definitions

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

3.1

vegetable powder

Vegetable (one or more) which have been ground into powder with or without addition of other food ingredients such as: fish flour, dried meat, beans, etc.

3.2

food grade packaging material

packaging material, made of substances which are safe and suitable for their intended use and which will not impart any toxic substance or undesirable odour or flavour to the product.

4 Requirements

4.1 Ingredients

4.1.1 Essential ingredients

- a) Vegetable (single or combination of different types), comprising at least 60% of the whole mixture.
- b) Vegetables to be used may be fresh, frozen or canned and shall comply with relevant standards

4.1.2 Optional ingredients

The following ingredients may be used in the manufacture of vegetable powder and shall comply with relevant standards, they include but not limited to:

- a) mushrooms complying with RS EAS 56, RS 302;
- b) fish flour complying with RS 362; and
- c) food ingredients other than vegetables

4.2 General requirements

Vegetable powder shall be;

- a) have characteristic taste and odour of the designated vegetable;
- b) be free from dirt, fungal growth and insect infestation;

4.3 Specific requirements

Vegetable powder mix shall comply with the specific requirements in Table 1 when tested in accordance with test methods specified therein.

Table 1 —Specific requirements for vegetable powder

S/N	Characteristic	Requirement	Test method
i.	Moisture content , %, by mass, max	11.0	ISO 1026
ii.	Acid insoluble ash in hydrochloric acid, % m/m, max.	1.0	RS ISO 763
iii.	Crude fibre, %, max.	15.0	RS ISO 5498

5 Food additives

Food additives may be used in vegetable powder mix in accordance with RS CODEX STAN 192.

6 Hygiene

6.1 Vegetable powder mix shall be produced, prepared and handled under hygienic conditions in accordance with RS CAC/RCP 1

6.2 Vegetable powder mix shall not exceed microbiological limits given in Table 2 when tested in accordance with the test methods specified therein.

Table 2 – Microbiological limits for vegetable powder

S/N	Microorganism	Maximum limit	Test Method
i.	TVC	10^3	RS ISO 4833-1
ii.	Yeast and moulds , cfu/g	10^2	RS ISO 21527-2
iii.	Salmonella spp per 25 g	Absent	RS ISO 6579
iv.	E.coli ,cfu/g	Absent	ISO 16649-2
v.	Staphylococcus aureus, cfu/g	Absent	RS ISO 6888-1

7 Contaminants

7.1 Pesticide residues

Vegetable powder mix shall comply with those maximum pesticide residue limits established by Codex Alimentarius Commission for similar commodities.

7.2 Other contaminants

Vegetable powder shall comply with those other contaminants limits established in CODEX STAN 228.

7.3 Aflatoxin

The maximum content of aflatoxins in vegetable powder mix when determined in accordance the method described in RS ISO 16050 shall not exceed 10µg/kg for total aflatoxins and 5 µg/kg for aflatoxin B₁.

8 Packaging

8.1 Vegetable powder shall be packaged in food grade materials that will safeguard the hygienic, nutritional and organoleptic qualities of the product.

8.2 Vegetable powder mix shall be packaged in corrugated cardboard boxes with poly liners.

9 Labelling

10.1. In addition to the requirements in RS EAS 38, the following specific labelling requirements shall apply and shall be legibly and indelibly marked

- c) The name of the product to be declared on the label shall be "Vegetable powder or accompanied by the specific name of the vegetable used
- d) List of ingredients in descending order
- e) Net contents
- f) Name, location and physical address of the manufacturer shall be declared
- g) Country of origin
- h) Lot identification
- i) Storage conditions
- j) Instruction for use
- k) date of manufacture
- l) expiry date
- m) Instructions for disposal of used package
- n) If declaration of food containing allergens

10.2 Nutrition Prohibition

10.2.1 No claims concerning medicinal (preventive, alleviative or curative) or other beneficial effects relating to the health of the consumer shall be made in respect of the properties of the product covered by the standard.

10.2.2 The way in which labels on the packaged water are presented shall not cause confusion with other categories of vegetable powder.

10.2.3 The use of any statement or of any pictorial device, which may create confusion in the mind of the public or in any way mislead the public about the nature, origin, composition and properties of vegetable powder put on sale, is prohibited.

10 Sampling

Sampling of vegetable powder shall be in accordance to RS ISO 874.

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Bibliography

- [1] GSO 2011, Vegetable powder mix standard

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