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Vegetable jams and jellies — Specification

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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 WDB, 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 551 was prepared by Technical Committee RSB/TC 038, *Processed fruits and vegetables.*

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

Vegetable jam and jelly — Specification

1 Scope

This Draft Rwanda Standard specifies requirements, sampling and test methods for jam and jelly intended for direct human consumption.

This standard does not apply to:

a) products when indicated as being intended for further processing such as those intended for use in the manufacture of fine bakery wares, pastries or biscuits;

b) products which are clearly intended or labelled as intended for special dietary uses;

c) reduced sugar products or those with a very low sugar content; and

d) products where the foodstuffs with sweetening properties have been replaced wholly or partially by

e) food additive sweeteners.

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.

CAC/RCP 53, *Code of Hygienic Practice for Fresh Fruits and Vegetables*

CODEX STAN 192, *General standard for food additives*

RS EAS 12, *Potable water — Specification*

RS EAS 38, *Labelling for prepacked foods — General requirements*

ISO 2173, *Fruit and vegetable products — Determination of soluble solids — Refractometric method*

ISO 2447, *Fruit and vegetable products — Determination of tin*

ISO 4832, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coliforms — Colony-count technique*

ISO 4833-1, *Microbiology of the food chain — Horizontal method for the enumeration of microorganisms — Part 1: Colony count at 30 degrees C by the pour plate technique*

ISO 4833-2, *Microbiology of the food chain — Horizontal method for the enumeration of microorganisms — Part 2: Colony count at 30 degrees C by the surface plating technique*

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

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

ISO 6634, *Fruits, vegetables and derived products — Determination of arsenic content — Silver diethyldithiocarbamate spectrophotometric method*

ISO 6636-2, *Fruits, vegetables and derived products — Determination of zinc content -- Part 2: Atomic absorption spectrometric method*

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-bromo4-chloro-3-indolyl beta-D-glucuronide*

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*

3 Terms and definitions

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

3.1

vegetable

.Fleshy, edible portion of the plant e.g. leaves, stem, roots, tubers, bulbs and flowers

3.2

jam

product brought to a suitable consistency, made from the whole vegetable, pieces of vegetable, the unconcentrated and/or concentrated vegetable pulp or vegetable puree, of one or more kinds of vegetable, which is mixed with foodstuffs with sweetening properties with or without the addition of water.

3.3

jelly

product brought to a semi solid gelled consistency and made from the juice and/or aqueous extracts of one or more vegetables, mixed with foodstuffs with sweetening properties , with or without the addition of water.

3.4

food grade packaging material

any material which when it comes in contact with food or if the area near food is unlikely to contaminate food with harmful materials

4 Requirements

4.1 Raw material

vegetable shall be a colour characteristic of the mode of cultivation, free of abnormal external moisture, free of any foreign smell and/or taste wholesome.

a) 4.1.2 Nutritive sweetening agents complying with relevant standards

b) 4.1.3 Water complying with RS EAS 12.

4.2 General requirements

Vegetable jam and jelly shall:

a) have the essential physical, chemical, nutritional characteristics, colour, aroma and flavour of the vegetable;

b) have uniform appearance, consistency and characteristic of the product and remain as such when stored under normal storage conditions; and

c) be free from extraneous material common to the vegetable, such as leaves, fruit cores and stems.

d) be free from syneresis.

4.3 Specific requirements

Vegetable jam and jelly shall comply with the specific requirements stipulated in Table 1 when tested in accordance with test methods specified therein

Table 1—Specific requirements for Vegetable jam and jelly

S/N	Characteristic	Requirement	Test method
i.	Vegetable content, %, min.	50	GMP
ii.	Total soluble solids (jams and jelly), %, m/m, min.	65	ISO 2173
iii.	Acid insoluble ash, mg/kg, max	0.5	ISO 763
iv.			

5 Food additives

Vegetable Jam and jelly may contain only permitted additives in accordance with CODEX STAN 192.

6 Contaminants

6.1 Pesticide residues

Vegetable jam shall comply with those maximum residue limits established by the Codex Committee on Pesticide Residues for this commodity.

6.2 Heavy metal

Vegetable jam and jelly shall not contain heavy metals in excess of the limits specified in Table 2 when tested in accordance with the methods specified therein.

Table 1 — Heavy metal contaminant limits in Vegetable jam and jelly

S/N	Characteristics	Maximum limit	Test method
i.	Lead as Pb	0.1	AOAC 979.17
ii.	Cadmium as Cd	0.2	AOAC 999.10

7 Hygiene

Vegetable jam and jelly shall be prepared and handled in accordance with CAC/RCP 53.

8 Microbiological limits

Vegetable jam and jelly shall not exceed microbiological limits in Table 2 when tested in accordance with test methods specified therein

Table 1 — Microbiological limits for Vegetable jam and jelly

S/N	Characteristics	Maximum limit	Test method
i.	Total viable counts, CFU/g	10^3	RS ISO 4833-1
ii.	*E. coli*, CFU/g	Absent	ISO 16649-2
iii.	*Salmonella spp* in 25 gl	Absent	RS ISO 6579-1
iv.	*Staphylococcus aureus*, CFU/g	Absent	RS ISO 6888-1
v.	Yeast and moulds, CFU/g	10^2	RS ISO 21527-1

9 Packaging

Vegetable jam and jelly shall be packaged in food grade containers which shall safeguard the safety and the quality of the product.

10 Labelling

In addition to the requirements of the RS EAS 38, the following specific provisions shall be legibly and indelibly labelled on each package:

a) name of the product as " Vegetable jam or jelly “;

b) name and address of importer, packer, exporter and/or distributor;

c) country of origin;

d) date of manufacture and expiry date;

e) list of ingredients;

f) net content in metric units;

g) storage condition;

h) batch number/lot number; and

i) trade mark, if any

11 Sampling

Sampling shall be done in accordance with Annex A

Annex A
(normative)

Sampling

A.1 Definitions

A.1.1 lot

collection of primary containers or units of the same size, type, and style manufactured or packed under similar conditions and handled as a single unit of trade

A.1.2 lot size

number of primary containers or units in the lot

A.1.3 sample size

total number of sample units drawn for examination from a lot

A.1.4 sample unit

container, a portion of the contents of a container, or a composite mixture of product from small containers that is sufficient for the examination or testing as a single unit. For fill of container, the sample unit shall be the entire contents of the container

A.2 Sampling plans

Sampling shall be done in accordance with the plan specified in Table A.1

TableA.1–Samplingplan

Lotsize(primarycontainers)	Sizeofcontainer, *n*[a]
Netweightequaltoorless than1kg(2.2lb)	
4800orless	13
4 801 to 24 000	21
24 001 to 48 000	29
48 001 to 84 000	48
84 001 to 144 000	84
144 001 to 240 000	126
Over 240 000	200
Net weight greater than 1 kg (2.2 lb) but not more than 4.5 kg (10 lb)	
2 400 or less	13
2 401 to 15 000	21
15 001 to 24 000	29
24 001 to 42 000	48
42 001 to 72, 000	84
72 001 to 120 000	126
Over 120 000	200
Net weight greater than 4.5 kg (10 lb)	
600 or less	13
601 to 2 000	21
2 001 to 7 200	29
7 201 to 15 000	48
15 001 to 24 000	84
24 001 to 42 000	126
Over 42 000	200
a n is the number of primary containers in sample.	

Annex B
(normative)

Temperature correction for standard model of sugar refractometer calibrated for 20 °C Sampling

Temperature °C	Percentageof drysubstance													
	5	10	15	20	25	30	35	40	45	50	55	60	65	70
	Subtractfrom drysubstance													
15	.29	.31	.33	.34	.34	.35	.36	.37	.37	.38	.39	.39	.40	.40
16	.24	.25	.26	.27	.28	.28	.29	.30	.30	.30	.31	.31	.32	.32
17	.18	.19	.20	.21	.21	.21	.22	.22	.23	.23	.23	.23	.23	.23
18	.13	.13	.14	.14	.14	.14	.15	.15	.15	.16	.16	.16	.16	.16
19	.06	.06	.07	.07	.07	.08	.08	.08	.08	.08	.08	.08	.08	.08
21	.07	.07	.07	.07	.07	.08	.08	.08	.08	.08	.08	.08	.08	.08
22	.13	.14	.14	.15	.15	.15	.15	.15	.16	.16	.16	.16	.16	.16
23	.20	.21	.22	.22	.23	.23	.23	.23	.24	.24	.24	.24	.24	.24
24	.27	.28	.29	.30	.31	.31	.31	.31	.31	.32	.32	.32	.32	.32
25	.35	.36	.37	.38	.38	.39	.40	.40	.40	.40	.40	.40	.40	.40
26	.42	.43	.44	.45	.46	.47	.48	.48	.48	.48	.48	.48	.48	.48
27	.50	.52	.53	.54	.55	.55	.56	.56	.56	.56	.56	.56	.56	.56
28	.57	.60	.61	.63	.63	.64	.64	.64	.64	.64	.64	.64	.64	.64
29	.66	.68	.68	.71	.72	.73	.73	.73	.73	.73	.73	.73	.73	.73
30	.74	.77	.78	.79	.80	.80	.81	.81	.81	.81	.81	.81	.81	.81

Bibliography

UNECE Standard Ffv-40 Concerning the Marketing and Commercial Quality Control of Vegetable 2017 Edition

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