

DNAMS 0026: 2023

First Edition

NAMIBIAN STANDARD

Marketing and commercial quality control of Sweetcorn

This Namibian standard is a home grown standard

Published by the Namibian Standards Institution (NSI)
Established by section 2 of the Standards Act, 2005 (Act No 18 of 2005)
37 Feld Street
P.O. Box 26364 Windhoek, Namibia
Tel +264-61386400, Fax +264-61-386454
Website: www.nsi.com.na
© NSI



Contents

National foreword.....	2
1. Scope.....	3
2. Normative references	3
3. Terms and Definitions	3
4. Provisions concerning quality.....	4
4.1 Minimum requirements.....	4
4.2 Maturity requirements	5
4.3 Classification.....	5
4.3.1 Class I	5
4.3.2 Class II	5
5. Provisions concerning sizing.....	5
6. Provisions concerning tolerances	5
6.1 Quality tolerances	6
6.1.1 Class I	6
6.1.2 Class II	6
6.2 Size tolerance	6
7. Provisions concerning presentation.....	6
7.1 Uniformity.....	6
7.2 Packaging	6
8. Provisions concerning marking	7
8.1 Identification.....	7
8.2 Nature of produce	7
8.3 Origin of produce.....	8
8.4 Commercial specifications	8
8.5 Official control mark or Official Inspection Mark (optional)	8
9. Contaminants.....	8
10. Hygiene.....	8

National foreword

This Namibian Standard (NAMS) is a homegrown and was approved for adoptions by the Namibian Standards Institution CEO.

Namibian standards are developed based on NSI Standards development procedures in accordance with the rules given in the International Organisation for Standardisation/ International Electrotechnical Commission (ISO/IEC) Directives and WTO – TBT World Trade Organisation code of Good Practice (which is published as Annex 3 in the TBT Agreement)

The NSI Management Technical Committee responsible for this standard is NSI TC 3, Food Safety Management Systems, Subcommittee SC3 on Horticulture products standards

This NAMS 0026:2023 was published in2023

DNAMS FOR COMMENT

Marketing and commercial quality control of Sweetcorn

1. Scope

This standard applies to Sweetcorn of the varieties (cultivars) *Zea mays* L, and excludes sweetcorn corn for industrial processing.

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 documents. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. Information on currently valid national and international standards are obtained from the Namibian Standards Institution (NSI)

CODEX STAN 193- 1995, *Codex General Standard for Contaminants and Toxin in Food and Feed*

CAC/RCP 1- 1969, *Recommended International Code of Practice- General Principle of Food Hygiene*

CAC/RCP 53- 2003, *Code of Hygienic Practice for Fresh Fruits and Vegetables*

CAC/GL 21- 1997, *Principle for the Establishment and Application of Microbiological Criteria for Foods*

CAC/RCP 44 – 1995, *Recommended International Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables*

ISO 874, *Fresh fruits and vegetables - Sampling*

3. Terms and Definitions

For the purpose of this document, the following definitions apply.

3.1

Bulk container

truck, any vehicle or container used for the transportation or storage of sweetcorn

3.2

Carrier container

container in which more than one consumer packages are packed

3.3**Consignment**

quantity of fruits or fresh vegetable of the same kind, belonging to the same owner and delivered at the same time under cover of the same delivery note, consignment note or receipt note, or delivered by the same vehicle; or in the case of a quantity of fruit or fresh vegetable that is divided into different cultivars, classes, pallet loads, trademarks, counts, size groups or types of packaging, every quantity of each of the different cultivars, classes, pallet loads, trademarks, counts, size groups or types of packaging

3.4**Decay**

state of decomposition or fungus development except dry stem-end rot, partly or completely affecting the quality of the sweetcorn detrimentally

3.5**Foreign matter**

any material not normally present in, on or among sweetcorn with the exception of soil;

4. Provisions concerning quality

This document describes the quality requirements for sweetcorn after preparation and packaging.

However, if applied at stages following warehousing and distribution, products may show in relation to the requirements of the standard:

- a slight lack of freshness
- a slight deterioration due to their development and their tendency to perish.

The holder/seller of products shall not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder/seller shall be responsible for observing such conformity.

4.1 Minimum requirements

In all classes, subject to tolerances allowed, the sweetcorn shall be:

- Be intact, fresh and firm
- Free from decay
- Clean and free from visible foreign matters, including soil
- Be free from Anthropoda infestation
- Free from insect damage or damage caused by other organisms;
- Free from blemishes
- Free from injuries
- Free from abnormal external moisture
- Free from cold damage
- Free from sun-scorch

- Free from any other factors detrimentally affect or may affect the quality of the sweetcorn
- Sound and attractive in appearance and have normal characteristics of the cultivar

4.2 Maturity requirements

The kernels shall, except in the case of miniature corn, be well formed, not underdeveloped, soft and milky and show no sign of dents or discolouration.

The cob shall be filled completely with kernels in straight rows.

4.3 Classification

Sweetcorn is classified into two (2) classes, as defined below:

4.3.1 Class I

Sweetcorn in class I shall be well trimmed, the stalk shall not be longer than 2 cm and less than 8mm and the end of the cob shall not be seedless for more than 2 cm.

4.3.2 Class II

Sweetcorn in class II shall be well trimmed, the stalk shall not be longer than 2 cm and less than 0.8 cm and the end of the cob shall not be seedless for more than 0.25 cm.

4.3.3 Miniature Sweet corn

In the case miniature sweet corn shall not be pollinated, but shall be conical, straight leading to a point. Include in definitions

The kernels shall be evenly mature and in straight rows without confusion or spiraling; and silk shall be absent.

5. Provisions concerning sizing

The maximum cob length in the case of Class I and Class II sweetcorn is 20 cm.

The minimum cob length in the case of Class I is 14 cm and in the case of Class II, the minimum cob length is 12 cm.

In the case of miniature corn, the minimum cob length is 6 cm and maximum cob length is 12 cm.

The minimum diameter is 0.8 cm and the maximum diameter 2 cm.

6. Provisions concerning tolerances

At all marketing stages, tolerances in respect of quality shall be allowed in each package for produce not satisfying the requirements of the class indicated.

6.1 Quality tolerances

6.1.1 Class I

A total tolerance of 10 %, by number or weight, of sweetcorn not satisfying the requirements of this class, but meeting those of Class II is allowed. Within this tolerance not more than 1 per cent in total may consist of produce satisfying neither the requirements of Class II quality nor the minimum requirements (Section 4.1), or of produce affected by decay.

6.1.2 Class II

A total tolerance of 10 % by number or weight of sweet corn not satisfying the minimum requirements of sweetcorn (Section 4.1) or that of Class I

6.2 Size tolerance

For all classes, 10% by number or weight of sweetcorn not satisfying the requirements as regards sizing, but falling within the size immediately above or below those indicated in Section 5.

7. Provisions concerning presentation

7.1 Uniformity

- a) The contents of each package (or lot for produce presented in bulk) shall be uniform and contain only sweetcorn of the same variety, origin, quality, colour, size and the same degree of development and ripeness
- b) The visible part of the contents of the package (or lot for produce presented in bulk) shall be representative of the entire contents
- c) However, a mixture of sweetcorn of distinctly different varieties and/or commercial types may be packed together in a package provided they are uniform in quality and, for each variety or commercial type concerned, in origin
- d) In the case of those mixtures uniformity in size is not required. The visible part of the contents of the package shall be representative of the entire contents

7.2 Packaging

- a) Sweetcorn shall be properly packed in such a way as to protect the produce.
- b) The materials used inside the package shall be clean and of good quality such as to avoid causing any external or internal damage to the produce.

- c) The use of materials, particularly of paper or stamps bearing trade specifications is allowed, provided the printing or labelling has been done with non-toxic ink or glue.
- d) Packages (or lot for produce presented in bulk) shall be free of foreign matter and smell.
- e) The containers shall meet quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, transportation and preserving of the sweetcorn.
- f) Sweetcorn shall be packed in each container in compliance with CAC/RCP 44-1995

8. Provisions concerning marking

Each package shall bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside printed either on the package itself or on a label secured to the fastening.

8.1 Identification

The following information shall be available:

- a) Packer and or dispatcher/ shipper name and physical address or postal address of the producer, exporter or owner of the content in the container to be provided
- b) The producer registration code or pack-house registration code, which is registered with the competent authority by the producer, exporter or pack- house
- c) If the producer has, more than one establishment shall be registered separately
- d) In the case where retailers/wholesalers and or traders may provide their preferred branded packaging material to producers for on farm packaging, that at least a sticker be placed on such a product that would identify the origin of the produce

8.2 Nature of produce

- a) Each package / lot shall be labelled as to the name of the produce and may be labelled as to the name of the variety or commercial type: e.g. "Sweetcorn", "Mixture of Sweetcorn"
- b) "Mixture of sweetcorn", or equivalent denomination is used, if the case of a mixture of distinctly different varieties or commercial types of melons. If the produce is not visible from the outside, the varieties and/or commercial types and the quantity of each in the package shall be indicated

8.3 Origin of produce

Country of origin and, optionally, district where grown, or national, regional or local place

In the case of a mixture of sweet corns of distinctly different varieties and/or commercial types of sweetcorns of different origins, the indication of each origin shall appear next to the name of the variety/commercial type concerned.

8.4 Commercial specifications

- Class
- Size, expressed as minimum and maximum weight or as minimum and maximum diameter
- Number of units (optional)
- Nett weight (optional)

8.5 Official control mark or Official Inspection Mark (optional)

Mark of an agency that conducted the quality inspection and offer certificate of conformity

9. Contaminants

The produce shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

10. Hygiene

It is recommended that the produce covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the CAC/RCP 1-1969, CAC/RCP 53-2003, and other relevant Codex text such as Codes of Hygienic Practice and Codes of Practice.

The produce shall comply with any microbiological criteria established in accordance with CAC/GL 21-1997