



DRAFT TANZANIA STANDARD

Fresh cabbage — Specification

DRAFT FOR STAKEHOLDERS' COMMENTS

TANZANIA BUREAU OF STANDARD

0 Foreword

Cabbages are one of the important vegetables produced in Tanzania both for local and export markets, valued for their vitamins, fibre and sugar content. They are mainly produced by smallholder farmers. Most cabbages are green in colour, but there are also varieties with red or purple foliage. The heads are more or less compact, and shapes range from roundish, oval to flattened sphere, depending on variety.

This Tanzania Standard is a revision of the second version finalized in 2016. This third edition cancels and replaces the second edition of TZS 1085: 2016, which has been technically revised.

In the preparation of this Tanzania Standard, considerable information was drawn from:

MS 892:1984, *Specification for cabbage*; published by the Standards & Industrial Research Institute of Malaysia

In reporting the results of a test or analysis made in accordance with this Tanzania Standard, if the final value observed or calculated is to be rounded off, it shall be done in accordance with TZS 4 (see clause 2).

1 Scope

This Tanzania Standard prescribes the requirements, methods of sampling and test for fresh cabbages, *Brassica oleracea* (L.), variety *capitata* intended for human consumption.

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, *General standard for contaminants and toxins in food and feed*

TZS 4, *Rounding off numerical values*

TZS 109, *Code of hygienic practice if food processing unit- General*

TZS 538, *Packaging and labelling of foods*

TZS 1002, *Fresh fruits and vegetables – Sampling*

TZS 1003, *Guide to the pre-packing of fresh fruits and vegetables*

3 Terms and definitions

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

3.1 similar varietal characteristics

some general features that are characteristic of the heads in a single lot

3.2 reasonably solid

fairly firm in the case of the round head and the drum head types

3.3 reasonably firm

not soft and of a reasonable weight for its size, but may have considerable open spaces between leaves in the lower portion of the head

3.4 puffy

very light in weight in comparison to the size or having excessive air spaces in the central portion

3.5 burst

cracking of the cabbage head as a result of over maturity and growth pressure

3.6 well trimmed

having not more than six wrapper leaves

3.7 damage

any injury or defect which materially affects the appearance of the edible or marketing quality. Holes appearing in any part of the compact portion shall be considered as damage

3.8 serious damage

any injury or defect which seriously affects the appearance of the edible or marketing quality of the heads. The heads injured by seed stems, freezing, diseases, insects or mechanical means shall be considered as seriously damaged. Severe infestation, injury and holes caused by pests, which seriously affect the appearance of the heads shall also be considered as seriously damaged

3.9 seed stem

seed stalk or even the plain beginning of the formation of a seed stalk

4 Requirements

4.1 General requirements

4.1.1 Types

There shall be two types of cabbages, based on head shape, namely; round or conical head and flat or drum head.

4.1.2 Grades

There shall be three grades in each type of cabbage, namely: grade 1, grade 2 and grade 3.

4.2 Specific requirements

4.2.1 Grade requirements

The requirements of the three grades of cabbages shall be as given below:

4.2.1.1 Grade 1

Heads of cabbages falling under this grade shall be:

- fresh;
- of uniform colour and of similar varietal characteristics;
- reasonably solid;
- not withered or puffy,
- not burst;
- free from soft rot and seed stem;
- free from damage caused by discolouration, freezing, diseases, insects, mechanical or other means;
- free from dead or live insects or larvae or their excreta;
- well trimmed having the stem flush with the outermost leaves; and
- the stem shall be cut to 10 mm or less below the wrapper leaves.

4.2.1.2 Grade 2

Heads of cabbages falling under this grade shall be reasonably:

- fresh;
- of uniform colour, and similar varietal characteristics;
- firm;
- not withered or puffy;
- not burst,
- free from soft rot and seed stem;
- free from damage caused by discolouration, freezing, diseases, insects, mechanical or other means;
- free from dead or live insects or larvae or their excreta;
- well trimmed having the stem flush with the outermost leaves; and
- the stem shall be cut to 10 mm or less below the wrapper leaves.

4.2.1.3 Grade 3

Heads of cabbages falling under this grade shall consist of cabbages, which do not conform to the requirements of either grade 1 or grade 2.

4.2.2 Size requirements

In addition to the requirements specified in 4.2.1, the heads of cabbages shall be classified on the basis of the weight of the heads into small, medium and large in accordance with table 1.

Table 1 — Weight/size of cabbage

Size of cabbage by weight (kg)		
Small	Medium	Large
< 0.5	0.5 to 1.5	> 1.5

5 Tolerances

5.1 Tolerance for grading

To allow for variations other than size, incident to proper grading and handling; not more than 5 % by count, of the heads may fail to meet the requirements of the grades.

5.2 Tolerance for size

To allow for variations incident to proper sizing, not more than 10 % by count of the heads may vary from the size specifications, but not more than 5 % shall be either above or below the size specified.

6 Contaminants

6.1 Heavy Metals

Fresh cabbage shall comply with those maximum levels for heavy metals established by the Codex Stan 193

6.2 Pesticide residues

Fresh cabbage shall comply with those maximum residue limits established by the Codex Alimentarius Commission for this commodity.

7 Hygiene

7.1 It is recommended that the produce covered by the provisions of this Tanzania Standard shall be prepared and handled in accordance with the TZS 109 (see clause 2)

7.2 Cabbages shall be free from parasites, microorganisms or substances originating from them in amounts, which may present a hazard to human health.

8 Sampling and test

Sampling of cabbages shall be carried out as prescribed in TZS 1002 (see clause 2) and be tested in accordance to the methods described in this Tanzania Standard.

9 Packing, marking and labelling

9.1 Packing

9.1.1 Fresh cabbage heads of the same variety, type and grade shall be packed in paper corrugated boxes, weighing 30 kg net or similar protective containers, to afford maximum protection from normal hazards of transportation and handling. The maximum allowable weight per container shall be 30 kg. Packages (or lot if the produce is presented in bulk) shall be free of foreign matter and shall be made of recyclable material.

9.1.2 Packing of cabbage shall be in accordance with TZS 1003 and TZS 538 (see clause 2).

9.2 Marking and labelling

Containers of cabbage shall be indelibly marked or labelled with the following information:

- a) Name of the produce, variety and type
- b) Grade and size
- c) Country of origin; including region and district
- d) Name and address of packer/distributor
- e) Net weight in kg
- f) Date of harvest and packing
- g) Storage condition
- h) Identification batch number (in code or in clear)

9.3 Certification mark

Each package may also be marked with TBS Standards Mark of Quality.

NOTE – The TBS Standards Mark of Quality may be used by the manufacturers only under license from TBS. Particulars of conditions under which the licenses are granted may be obtained from TBS.

DRAFT FOR STAKEHOLDERS' COMMENTS

DRAFT FOR STAKEHOLDERS' COMMENTS

