



DRAFT TANZANIA STANDARD

Pomegranate - specification

DRAFT STANDARD FOR PUBLIC COMMENTS ONLY

TANZANIA BUREAU OF STANDARD

0 foreword

Pomegranate is a berry fruit rounded hexagonal in shape with thick skin varying from yellow, red to purple. The fruit contain numerous small pink seeds surrounded by edible pulp called arils. Pomegranates are rich in fiber, vitamins, minerals and antioxidants.

This Tanzania Standard was prepared in order to provide guidance to pomegranate producers and traders as well as regulators, and to ensure safety and quality of the produce.

In the preparation of this Tanzania Standard considerable assistance was derived from: Codex Alimentarius CXS 310-2013 *Standard for pomegranate*.

In reporting the results of a test or analysis made in accordance with this 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 standard specifies quality and safety requirements, methods of sampling and test of pomegranate fruits grown from *Punica granatum* L. of the *Punicaceae* family, to be supplied fresh to the consumer. Pomegranates for industrial processing are excluded.

2 Normative references

The following referenced standards are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced standards (including any amendments) applies.

- a) TZS 4, *Rounding off of numerical values*
- b) TZS 109, *Code of hygiene for food processing unit*
- c) TZS 538, *Packaging, marking and labeling of foods*.
- d) TZS 1002, *Fresh fruits and vegetables - Sampling*
- e) TZS 1003, *Guide to the pre-packaging of fresh fruits and vegetables*
- f) TZS 1743, *Code of hygienic practice for fresh fruits*
- g) Codex Stan 193, *Codex General standard for contaminants and toxins in food and feed*
- h) *Codex pesticide residues in food online data base*

3 Terms and definitions

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

3.1 produce

fresh pomegranate fruit

3.2 sound

produce not affected by rotting or deterioration such as to make it fit for consumption

3.3 clean

practically free of any visible foreign matter

3.4 pest

any organism that directly or indirectly affects the quality and safety of the produce

3.5 arils

edible pulp surrounding seeds of pomegranate fruit

3.6 whole

uninjured, unbroken and undamaged pomegranate fruits consumed freshly

4 Requirements

4.1 General requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the pomegranates shall be:

- whole;
- sound;
- clean;
- free of pests and damage caused by them;
- free of abnormal external moisture, excluding condensation following removal from cold storage;
- free of any foreign smell and/or taste;
- free of damage caused by frost;
- free of damage caused by temperatures;
- free of sunburns affecting the arils of the fruit.

4.1.1 The pomegranates shall have reached an appropriate degree of development and ripeness in accordance with criteria proper to the varieties and to the area in which they are grown.

The development and condition of the pomegranates shall be such as to enable them to:

- withstand transport and handling; and
- arrive in satisfactory condition at the place of destination.

4.2 Classification

Pomegranates shall be classified in three classes as defined below:

4.2.1 “Extra” class

Pomegranates in this class shall be of superior quality. They shall be characteristic of the variety. They shall be free of defects, with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

4.2.2 Class I

Pomegranates in this class shall be of good quality. They shall be characteristic of the variety. The following slight defects may be allowed, provided they do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- slight defects in shape;
- slight defects in colouring;
- slight skin defects including cracking.

The defects shall not, in any case, affect the arils of the fruit.

4.2.3 Class II

This class includes pomegranates which do not qualify for inclusion in the higher classes, but satisfy the general requirements specified in clause 4.1. The following defects, may be allowed, provided the pomegranates retain their essential characteristics with regard to the quality, the keeping quality and presentation:

- defects in shape;
- defects in colouring;
- skin defects including cracking.

The defects shall not, in any case, affect the arils of the fruit.

4.3 Provisions concerning sizing

Pomegranate may be sized by count, diameter or weight in accordance with existing commercial trading practices. When such is the case, the package shall be labelled accordingly.

- a. When sized by count, size is determined by the number of individual fruit per package.
- b. Pomegranate may be sized by diameter (the maximum diameter of the equatorial section of each fruit) using Table A as a guide.

Table A – Size by diameter

Size code		Diameter (mm)
1	A	≥81
2	B	71 – 80
3	C	61 -70
4	D	51 – 60
5	E	40 – 50

- c. Pomegranate may be sized by weight (the individual weight of each fruit) using Table B as a guide

Table B – Size by weight

Size code		Weight (g)
1	A	≥ 501
2	B	401 - 500
3	C	301 - 400
4	D	201 - 300
5	E	125 - 200

4.4 Provisions concerning tolerances

Tolerances in respect of quality and size shall be allowed in each package for produce not satisfying the requirements of the class indicated.

4.4.1 Quality tolerances

4.4.1.1 “Extra” class

Five percent by number or weight of pomegranates not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerances of that class.

4.4.1.2 Class I

Ten percent by number or weight of pomegranates not satisfying the requirements of the class, but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

4.4.1.3 Class II

Ten percent by number or weight of pomegranates satisfying neither the requirements of the class nor the general requirements, with the exception of produce affected by rotting or any other deterioration rendering it unfit for consumption.

4.4.2 Size tolerances

For all classes, 10% by number or weight of pomegranates corresponding to the size immediately above and/or below that specified in section 4.3.

4.5 Provisions concerning presentation

4.5.1 Uniformity

The contents of each package shall be uniform and contain only pomegranates of the same origin, variety, quality and size (if sized). Packages may contain mixtures of varieties of different colours and sizes provided they are uniform in quality and for each variety concerned, its origin.

The visible part of the contents of the package shall be representative of the entire contents.

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6 Hygiene

6.1 It is recommended that the produce covered by the provisions of this Standard be prepared and handled in accordance with TZS 1002 (see clause 2) and TZS 1743.

7 Contaminants

7.1 Heavy metal contaminants

Pomegranate shall comply with those maximum metal contaminants established by the Codex Stan 193.

7.2 Pesticide residues

Pomegranate shall comply with those maximum residue limits established in the Codex pesticide residues in food online data base.

8 Sampling and tests

8.1 Sampling

Representative samples of pomegranate shall be drawn as prescribed in TZS 1002 (see clause 2).

8.2 Tests

Tests shall be done in accordance with the methods prescribed in this standard.

9. Packing, marking and labelling

9.1 Packing

Pomegranate shall be packed in such a way as to protect the produce properly. The materials used shall be of food grade, clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications, is allowed, provided the printing or labelling has been done with nontoxic ink or glue.

9.1.1 The containers shall meet the quality, hygiene, ventilation and resistance characteristics that shall ensure suitable handling, shipping and preserving pomegranate. Packages shall be free of foreign matter and objectionable smell.

9.1.2 The use of any substance tending to modify the natural characteristics of the produce, especially form, texture and taste shall be prohibited.

9.1.3 In addition to the provisions covered by this standard, pomegranate shall also be packed in accordance with TZS 538 and TZS 1003 (See clause 2).

9.2 Marking and labelling

9.2.1 Each package shall legibly and indelibly bear the following information in Swahili or and English on the same side:

- a) Name and address of exporter/importer, packer and/or dispatcher;
- b) Name of the produce (Pomegranate) and variety (where appropriate);
- c) Country of origin;
- d) Class;
- e) Size (if sized) expressed in accordance with any one of the following methods:
 - Count,
 - Size code and range,
 - Size range,
- f) Batch number;
- g) Net weight (kg);
- h) Storage condition

9.2.2 Certification mark – Each container may also be marked with TBS certification mark.

NOTE: The use of TBS certification mark is governed by provisions of the Standards Act, 2009. Details of the conditions under which a license for the use of TBS certification mark may be granted to manufacturers or producers, may be obtained from TBS.