
FRESH RASPBERRIES - SPECIFICATION

ICS: 67.080.01

Published by Ethiopian Standards Agency

©ESA

Foreword

This Ethiopian Standard has been prepared under the direction of the Technical committee for fruit and vegetable (TC-13) and published by Ethiopian Standard Agency (ESA).

In preparation of this Ethiopian Standard, references have been made to the following:

Codex Stan 193, Codex general standard for contaminants and toxins in food.

Acknowledgement is made for the use of information from the above publications.

FRESH RASPBERRIES - SPECIFICATION

1 Scope

This standard shall apply to Fresh raspberries of the species *Rubus idaeus* L. as defined below and offered for direct consumption without further processing, except for repacking if required.

2 Normative reference

3 Description

3.1 Product Definition

Fresh raspberries are the product prepared from fresh, clean, sound, ripe and stemmed raspberries of firm texture conforming to the characteristics of *Rubus idaeus* L. (red, yellow or black varieties).

4 Terms and Definition

- a) **Partially uncoloured berries** - 25 to 75% of the surface area without the colour characteristic of the variety;
- b) **Completely uncoloured berries** - 75% or more of the surface area without the colour characteristic of the variety;
- c) **Stalks (cap stems)** - a stalk or portions of stalk, either loose or attached to the berry, and greater than 3 mm in length;
- d) **Extraneous vegetable matter (E.V.M.)** - calyces or portion of calyces, leaves or other harmless extraneous vegetable material;
- e) **Blemished** - any damage whether due to pathological injury or pests which materially affect the appearance of the berry;
Minor blemishes are those that do not exceed the area of a circle having a diameter of 5 mm.
Major blemishes are those that exceed the area of a circle having a diameter of 5 mm.
- f) **Not normally developed** - berries containing shrivelled parts in the fruit fresh (drupelets);
- g) **Dissimilar varieties** - berries that are significantly different in colour or shape due to varietal characteristics;
- h) **Disintegrated or not intact** - berries in which more than 25% of the berry is missing or berries which are crushed, broken or smashed into small pieces or flattened into a pulpy mass.

5 General requirement

5.1 Minimum Maturity Requirements

The berries must have reached an appropriate degree of development and/or maturity in accordance with the criteria proper to the species, variety, and to the area in which they are grown, that allows the proper development of its organoleptic characteristics.

5.2 Handling Practice

The product shall be handled under such conditions to maintain the quality during transportation, storage, distribution and including the time of final sale in accordance with the provisions on International Code of Practice for the Processing and Handling of Fresh Fruit (CAC/RCP 8-1976).

5.3 Presentation Style

Fresh raspberries may be presented as free flowing (i.e., as individual berries not adhering to one another) or non-free flowing (i.e., as a bunch).

6 Specific Requirements

6.1 Fresh raspberries shall be:

- a) of good, reasonably uniform colour, characteristic of the variety;
- b) clean, sound and practically free from foreign matter;
- c) free from foreign flavour and odour; and with respect to visual or other defects with a tolerance shall be:
 - practically free from sand and grit;
 - when presented as free-flowing, practically free from berries adhering one to another and which cannot be easily separated when in the fresh state;
- d) reasonably free from uncoloured berries;
- e) practically free from completely uncoloured berries;
- f) reasonably free from stalks (cap stems);
- g) practically free from extraneous vegetable matter;
- h) reasonably free from damage or blemish due to pathological injury or pests;
- i) normally developed;
- j) of similar varietal characteristics
- k) reasonably free from disintegrated berries or berries not intact.

7 CLASSIFICATION

The berries are classified into three classes as defined below:

7.1 “Extra” Class

- a) The berries in this class must be of superior quality and they must be characteristic of the variety and/or commercial type
- b) The pulp shall be perfectly sound and free from defects,
- c) 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.

7.2 Class I

- a) The berries in this class must be of good quality and characteristics of the variety. The pulp must be perfectly sound.
- b) The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package
 - a slight defect in shape;
 - slight defects in coloring, and
 - slight skin defects.
- c) The defects must not, in any case, affect the pulp of the fruit or berry.

7.3 Class II

This class includes berries that do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified in Section 7.1 above.

The following defects may be allowed, provided the berry fruits retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape;
- defects in colouring;
- skin defects;
- Slight pulp leak
- Slight samples of mold

- Slight bruising

8 Analytical characteristics

Mineral impurities - not more than 0.05% m/m on a whole product basis (berries and packing medium, if any).

9 Standard Sample Unit

The sample unit for segregation and evaluating visual effects shall be 300 grammas of fresh berry ingredient

10 Tolerance for visual defects

Based on standard sample unit size of 300 grammes, visual defects shall be assigned points in accordance with Table 1. The maximum number of defects permitted is the "Total Allowable Point" rating indicated for the respective categories "minor", "major", "serious" and "total".

Table 1 Sample unit – 300g drained berries

Defect	Unit of Measurement	Defect Categories			
		Minor	Major	Serious	Total
Partially uncolored berries	Each berry	1			
Completely uncolored berries	Each berry			4	
Stalks (cap stems)	Each Piece		2		
E.V.M	Each cm ³		2		
Blemished					
Minor	Each berry	1			
Major	Each berry		2		
Not Normally developed	Each berry	1			
Dissimilar Varities	Each berry		2		
Total Allowable Points		15	10	4	20
Disintegration or not intact	Maximum of 35 % mm				

11 Tolerances for quality

At all marketing stages, tolerances in respect of quality shall be allowed in each lot for produce not satisfying the requirements of the class indicated. Produce that fail conformity assessment, may be allowed to be resorted and brought into conformity in accordance with the relevant provisions in the Guidelines for Food Import Control System (CXG 47-2003).

The tolerances for decay may be established depending on the number or weight of the sample established for the type of berries to inspect.

11.1 "Extra" Class

Five percent 5.0% allowed by number or weight, of berries not satisfying the requirements of the

class, but meeting those of Class I. Included there in, is one percent tolerance for decay, soft rot and/or internal breakdown.

11.2 Class I

Ten percent 10.0% allowed by number or weight, of berries not satisfying the requirements of the class, but meeting those of Class II. Included therein, is one percent tolerance for decay, soft rot and/or internal breakdown.

11.3 Class II

Ten percent 10.0% allowed by number or weight, of berries not satisfying the requirements of the class. Included therein, is two percent tolerance for decay, soft rot and/or internal breakdown.

12 CONTAMINANTS

The produce covered by this Standard shall comply with those maximum levels for heavy metals and pesticide residue established by the Codex Alimentarius Commission (CODEX STAN 193) for this commodity respectively

13 HYGIENE

13.1 It is recommended that the produce covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of ES 577, ES 929, and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

13.2 The produce should comply with any microbiological criteria established in accordance with CAC/GL 21.

14 Packaging and Labelling

14.1 Packaging

Berries must be packed in such a way as to protect the produce properly. The materials used inside the package must be of food-grade quality, 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.

Berries shall be packed in each container in compliance with the Code of Practice for Packaging and Transport of Fresh Fruits and Vegetables (CAC/RCP 44-1995). (ES xx)

Packaging used for Fresh raspberries shall:

- (a) protect the organoleptic and other quality characteristics of the product;
- (b) protect the product against microbiological and other contamination;
- (c) protect the product, as far as practicable, against dehydration, heat accumulation by adiation, and, where appropriate, leakage;
- (d) not pass on to the product any odour, taste; colour or other foreign characteristic, throughout the processing (where applicable) and distribution of the product up to the time of final sale.

14.2 LABELLING

The labeling of containers of berries shall comply with the requirements of CES 73 and shall be legibly and indelibly marked with the following:

14.2.1 Consumer packages

The requirement of the *General Standard for the Labelling of Pre-packaged Foods* (CES 73), the following specific provisions shall apply:

14.2.2 Name of Produce

Each shall be labelled as to the name of the produce and may be labelled as to name of the variety and /or commercial type.

14.2.3 Origin of Produce

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

In the case of a mixture of distinctly different varieties of black currant from different origins for each variety,

the indication of each country of origin shall appear next to the name of the variety.

14.2.4 Non-retail containers

Each package must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside.

For black currant transported in bulk (direct loading into a transport vehicle) these particulars must appear on a document accompanying the goods, and attached in a visible position inside the transport vehicle unless the document is replaced by an electronic solution. In that case the identification must be machine readable and easily accessible.

14.2.5 Identification

Name and address of exporter, packer and/or dispatcher, Identification code (optional).

Packer and/or dispatcher/shipper: Name and physical address (e.g. street/city/region/postal code and, if different from the country of origin, the country) or a code mark officially recognized by the national authority.

10.1 Name of Produce

- Name of the produce, name of the variety (optional).
- The name of the variety can be replaced by a synonym. A trade name can only be given in addition to the variety or the synonym.
- Name of the variety. In the case of a mixture of black currant of distinctly different varieties, names of the different varieties.
- Names of the different varieties.
- "Mixture of black currant", or equivalent denomination, in the case of a mixture of distinctly different commercial types and/or colours of black currant. If the produce is not visible from the outside, the

commercial types and/or colours and the quantity of each in the package must be indicated in each container.

- Name according the nature of the produce.

14.2.6 Origin of produce

Country of origin and, optionally, district where grown, or national, regional or local place name. In the case of a mixture of distinctly different varieties of black currant of different origins, the indication of each country of origin shall appear next to the name of the variety.

Organization and Objectives

The Ethiopian Standards Agency (ESA) is the national standards body of Ethiopia established in 2010 based on regulation No. 193/2010. ESA is established due to the restructuring of Quality and Standards Authority of Ethiopia (QSAE) which was established in 1998.

ESA's objectives are:-

- ❖ Develop Ethiopian standards and establish a system that enable to check whether goods and services are in compliance with the required standards,
- ❖ Facilitate the country's technology transfer through the use of standards,
- ❖ Develop national standards for local products and services so as to make them competitive in the international market.

Ethiopian Standards

The Ethiopian Standards are developed by national technical committees which are composed of different stakeholders consisting of educational Institutions, research institutes, government organizations, certification, inspection, and testing organizations, regulatory bodies, consumer association etc. The requirements and/or recommendations contained in Ethiopian Standards are consensus based that reflects the interest of the TC representatives and also of comments received from the public and other sources. Ethiopian Standards are approved by the National Standardization Council and are kept under continuous review after publication and updated regularly to take account of latest scientific and technological changes. Orders for all Ethiopian Standards, International Standard and ASTM standards, including electronic versions, should be addressed to the Documentation and Publication Team at the Head office and Branch (Liaisons) offices. A catalogue of Ethiopian Standards is also available freely and can be accessed from our website.

ESA has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of ESA.

International Involvement

ESA, representing Ethiopia, is a member of the International Organization for Standardization (ISO), and Codex Alimentarius Commission (CODEX). It also maintains close working relations with the International Electro-technical Commission (IEC) and American Society for Testing and Materials (ASTM). It is a founding member of the African Regional Organization for standardization (ARSO).

More Information?

Contact us at the following address.

The Head Office of ESA is at Addis Ababa.

☎ 011- 646 06 85, 011- 646 05 65

☎ 011-646 08 80

✉ 2310 Addis Ababa, Ethiopia

E-mail: info@ethiostandards.org,

Website: www.ethiostandards.org



Standard Mark