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# **UNECE STANDARD FFV-52**

concerning the marketing and  
commercial quality control of

## **EARLY AND WARE POTATOES**

**2021 EDITION**



**UNITED NATIONS**  
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## NOTE

### **Working Party on Agricultural Quality Standards**

The commercial quality standards developed by the Working Party on Agricultural Quality Standards of the United Nations Economic Commission for Europe (UNECE) help facilitate international trade, encourage high-quality production, improve profitability and protect consumer interests. UNECE standards are used by Governments, producers, traders, importers and exporters, and other international organizations. They cover a wide range of agricultural products, including fresh fruit and vegetables, dry and dried produce, seed potatoes, meat, cut flowers, eggs and egg products.

Any member of the United Nations can participate, on an equal footing, in the activities of the Working Party. For more information on agricultural standards, please visit our website <http://www.unece.org/trade/agr/welcome.html>.

The present revised Standard for Early and Ware Potatoes is based on document ECE/TRADE/C/WP.7/2011/8, reviewed and adopted by the Working Party at its sixty-seventh session.

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# UNECE standard FFV-52 concerning the marketing and commercial quality control of early and ware potatoes

## I. Definition of produce

This standard applies to early and ware potatoes of varieties (cultivars) grown from *Solanum tuberosum* L. and its hybrids, to be supplied fresh to the consumer, early and ware potatoes for industrial processing being excluded.

Early potatoes are obtained from early varieties and/or are harvested at the beginning of the season in the country of origin. Early potatoes mean potatoes harvested before they are completely mature, marketed immediately after their harvesting, and whose skin can be easily removed without peeling.

## II. Provisions concerning quality

The purpose of the standard is to define the quality requirements for early and ware potatoes after preparation and packaging.

However, if applied at stages following export/dispatch, products may show in relation to the requirements of the standard:

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

The holder/seller of products may 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.

### A. Minimum requirements

- (a) Subject to the tolerances allowed, the tubers must be:
- of normal appearance for the variety, according to the producing area
  - intact, i.e. they should not have had any part removed nor have suffered any damage making them incomplete
  - sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
  - practically clean
  - firm
  - free of external or internal defects detrimental to the general appearance of the produce, the quality, the keeping quality and presentation in the package, such as:
    - brown stains due to heat
    - cracks (including growth cracks), cuts, bites, bruises or roughness (only for varieties of which the skin is not normally rough) exceeding 4 mm in depth
    - green colouration; pale green flush not exceeding one eighth of the surface area and which can be removed by normal peeling does not constitute a defect
    - serious deformities
    - grey, blue or black sub-epidermal stains; exceeding 5 mm in depth in the case of ware potatoes
    - rust stains, hollow or black hearts and other internal defects

- deep common potato scab and powdery potato scab, of a depth of 2 mm or more in the case of ware potatoes
- superficial common potato scab, i.e. scab spots in all must not extend over more than a quarter of the surface of the tuber
- frost damage and freezing injuries
- free of abnormal external moisture, i.e. adequately “dried” if they have been washed
- free of any foreign smell and/or taste.

In the case of early potatoes, a partial absence of the skin shall not be considered as a defect. Ware potatoes must be covered with well-formed skin, i.e. the skin has to be fully developed and mature and cover the whole surface of the tuber.

In early potatoes, no sprouting is allowed. Ware potatoes must be practically unsprouted, i.e. sprouts may be no longer than 3 mm.

The development and condition of the early and ware potatoes must be such as to enable them:

- to withstand transportation and handling
- to arrive in satisfactory condition at the place of destination.

(b) Each package or lot must be free from waste, i.e. attached or loose earth, detached growth shoots, extraneous matter.

### **III. Provisions concerning sizing**

Size of the tuber is determined by square mesh.

Tubers must be of:

- a minimum size such that they do not pass through a square mesh of:
  - 28 mm x 28 mm for early potatoes
  - 35 mm x 35 mm for ware potatoes
  - 30 mm x 30 mm for long varieties of ware potatoes defined hereafter
- a maximum size such that they pass through a square mesh of 80 mm x 80 mm, or for long varieties, 75 mm x 75 mm.

Early and ware potatoes exceeding the maximum size shall be allowed, provided the maximum difference in size between the smallest and the largest tuber is not more than 30 mm and they are marketed under a specific denomination.

Tubers of a size range between 18 mm and 35 mm can be marketed under the denomination of “mids” or an equivalent denomination.

Uniformity in size is not compulsory. However, in sales packages up to 5 kg net weight, the maximum difference allowed between the smallest and the largest tuber must not exceed 30 mm.

A variety is considered as long if it is listed as long or long oval in the national list of varieties of the country where it has been bred.

The sizing requirements do not apply to long varieties of irregular shape (e.g. Stella, Ratte or Pink Fir Apple).

## IV. Provisions concerning tolerances

At all marketing stages, tolerances in respect of quality and size shall be allowed in each lot for produce not satisfying the minimum requirements.<sup>1</sup>

### A. Quality tolerances

(a) Tubers not satisfying the minimum requirements shall be allowed:

- 4 per cent by weight of tubers of early potatoes
- 6 per cent by weight of tubers of ware potatoes.

However, within this tolerance, a maximum of 1 per cent by weight of tubers affected by dry or wet rot shall be allowed.

(b) In addition the following shall be allowed:

- 1 per cent by weight of waste for early potatoes
- 2 per cent by weight of waste, of which a maximum of 1 per cent of attached earth, for ware potatoes.

### B. Size tolerances

A total tolerance of 10 per cent, by weight of tubers, not satisfying the requirements as regards sizing is allowed.

### C. Tolerances of other varieties

2 per cent by weight of other varieties is allowed.

## V. Provisions concerning presentation

### A. Uniformity

The contents of each package (or lot for produce presented in bulk in the transport vehicle) must be uniform and contain only early or ware potatoes of the same origin, variety, quality, colour of the skin, colour of the flesh and size (if sized).

The visible part of the contents of the package (or lot for produce presented in bulk in the transport vehicle) must be representative of the entire contents.

### B. Packaging

Early and ware potatoes must be packed in such a way as to protect the produce properly and to ensure adequate ventilation.

The materials used inside the package must be 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 non-toxic ink or glue.

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<sup>1</sup> A conformity check shall be made by assessing primary or composite samples. It is based on the principle of presumption that the quality of the randomly taken samples is representative of the quality of the lot. The OECD Operating Rules for Conformity Checks are recommended for application – also by operators – at the stages of dispatch as well as in wholesale and distribution centres and storerooms of food retail. <http://www.oecd.org/agriculture/fruit-vegetables/publications/oecd-fruit-and-vegetables-rules.htm>.

In the case of early potatoes, special packaging materials (e.g. peat) may be used in order to better protect the produce during long-distance transport.<sup>2</sup>

Packages must be free of all foreign matter.

## **VI. Provisions concerning marking**

Each package<sup>3</sup> must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside either printed on the package itself or on a label secured to the fastening. If the labels are placed inside the packages (string bags), this should be done in such a way that the indications concerning marking are readable from the outside.

For early and ware potatoes 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.

### **A. Identification**

Packer and/or dispatcher/exporter:

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<sup>4</sup> if the country applying such a system is listed in the UNECE database.

### **B. Nature of produce**

- “Early Potatoes”, “New Potatoes” or equivalent denomination, or “Ware Potatoes” if the contents are not visible from the outside
- Name of the variety
- Specific denomination for early and ware potatoes exceeding the maximum size, where appropriate
- “Mids” or an equivalent denomination, where appropriate.

### **C. Origin of produce**

- Country of origin<sup>5</sup> and, optionally, district where grown, or national, regional or local place name.

### **D. Commercial specifications**

- Size (if sized) expressed as minimum size followed by the words “and over” or as minimum and maximum size
- Optional indications: colour of flesh (e.g. yellow or white), colour of skin, shape of tuber (round or long) and cooking type (e.g. floury or firm).

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<sup>2</sup> The use of some packaging materials (e.g. peat) is not permitted in some countries.

<sup>3</sup> These marking provisions do not apply to sales packages presented in packages bearing these particulars. However, they do apply to sales packages (pre-packages) presented individually.

<sup>4</sup> The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark, and the code mark should be preceded by the ISO 3166 (alpha-2) country/area code of the recognizing country, if not the country of origin.

<sup>5</sup> The full or a commonly used name should be indicated.

**E. Official control mark (optional)**

Adopted 1961

Last revised 2011

Aligned with the Standard Layout 2021

The OECD Scheme for the Application of International Standards for Fruit and Vegetables has published an explanatory illustrated brochure on the application of this standard. The publication may be obtained from the OECD bookshop at: [www.oecdbookshop.org](http://www.oecdbookshop.org).

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