

UNECE STANDARD FFV-04

concerning the marketing and
commercial quality control of

ASPARAGUS

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NOTE

Working Party on Agricultural Quality Standards

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The present revised Standard for Asparagus is based on document ECE/TRADE/C/WP.7/GE.1/2010/INF.55, reviewed and adopted by the Working Party at its sixty-sixth session.

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UNECE standard FFV-04 concerning the marketing and commercial quality control of asparagus

I. Definition of produce

This standard applies to shoots of asparagus of the varieties (cultivars) grown from *Asparagus officinalis* L. to be supplied fresh to the consumer, asparagus for industrial processing being excluded.

Asparagus is classified into four groups according to colour:

- white asparagus
- violet asparagus, having tips of a colour between pink and violet or purple and a part of the shoot white
- violet/green asparagus, part of which is of violet and green colouring
- green asparagus having tips and most of the shoot green.

This standard does not apply to green and violet/green asparagus of less than 3 mm diameter and white and violet asparagus of less than 8 mm diameter, packed in uniform bundles or unit packages.

II. Provisions concerning quality

The purpose of the standard is to define the quality requirements for asparagus at the export-control stage after preparation and packaging.

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

- a slight lack of freshness and turgidity
- for products graded in classes other than the “Extra” Class, 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

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

- intact
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- clean, practically free of any visible foreign matter
- fresh in appearance and fresh-smelling

- practically free from pests
- practically free from damage caused by pests
- practically unbruised
- free of abnormal external moisture, i.e. adequately “dried” if they have been washed or cooled with cold water
- free of any foreign smell and/or taste.

The cut at the base of the shoots must be as clean as possible.

In addition, asparagus must be neither hollow, split, peeled nor broken. Small cracks which have appeared after harvesting are, however, allowed, so long as they do not exceed the limits laid down in Section IV. A. “Quality Tolerances”.

The development and condition of the asparagus must be such as to enable them:

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

B. Classification

Asparagus is classified in three classes, as defined below:

(i) “Extra” Class

Asparagus in this class must be of superior quality, very well formed and practically straight. They must be characteristic of the variety and/or commercial type. Having regard to the normal characteristics of the group to which they belong, their tips must be very compact.

Only a few very slight traces of rust on the shoot, removable by normal peeling by the consumer, are allowed.

For the white asparagus group, the tips and shoots must be white; only a faint pink tint is allowed on the shoots.

Green asparagus must be totally green.

No traces of woodiness are allowed for the shoots in this class.

The cut at the base of the shoots must be as square as possible. However, to improve presentation when the asparagus is packed in bundles, those on the outside may be slightly bevelled, so long as the bevelling does not exceed 1 cm.

They must be free from defects, with the exception of very slight superficial defects, provided that these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

(ii) Class I

Asparagus in this class must be of good quality. They must be characteristic of the variety and/or commercial type. Having regard to the normal characteristics of the group to which they belong, their tips must be compact.

Green asparagus must at least be green for 80 per cent of the length.

The cut at the base of the shoots must be as square as possible.

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, i.e. the shoots may be slightly curved
- a faint pink tint on the tips and the shoots of the white asparagus group
- slight traces of rust removable by normal peeling by the consumer
- a trace of woodiness on the lower part of the shoot of the violet, violet-green and green asparagus group, provided this woodiness disappears by normal peeling by the consumer.

(iii) Class II

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

Green asparagus must at least be green for 60 per cent of the length.

The cut at the base of the shoots may be slightly oblique.

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

- defects in shape; i.e. the shoots may be more curved than in Class I and having regard to the normal characteristics of the group to which they belong, the tips may be slightly open
- a green tint on the tips of white asparagus and a light green tint on the tips of violet asparagus
- traces of rust, removable by normal peeling by the consumer
- slight woodiness.

III. Provisions concerning sizing

Size is determined by the length and diameter of the shoot.

A. Sizing by length

The length of the shoots must be:

- above 17 cm for long asparagus
- 12 to 17 cm for short asparagus
- for Class II asparagus arranged, but not bundled in the package:
 - white and violet: 12 to 22 cm
 - violet/green and green: 12 to 27 cm
- under 12 cm for asparagus tips.

The maximum length allowed for white and violet asparagus is 22 cm, and for violet/green and green asparagus 27 cm.

To ensure uniformity in size, the range in length between shoots packed in firmly bound bundles shall not exceed 5 cm.

B. Sizing by diameter

The diameter of shoots shall be measured at the mid-point of their length.

White and violet asparagus:

| <i>Class</i> | <i>Minimum diameter</i> | <i>The range in size between produce in the same package or bundle shall not exceed</i> |
|--------------|-------------------------|---|
| Extra | 12 mm | 8 mm |
| I | 10 mm | 10 mm |
| II | 8 mm | No provision as to uniformity |

Violet/green and green asparagus:

| <i>Class</i> | <i>Minimum diameter</i> | <i>The range in size between produce in the same package or bundle shall not exceed</i> |
|--------------|-------------------------|---|
| Extra and I | 3 mm | 8 mm |
| II | 3 mm | No provision as to uniformity |

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 requirements of the class indicated.

A. Quality tolerances

(i) "Extra Class"

A total tolerance of 5 per cent, by number or weight, of asparagus not satisfying the requirements of the class but meeting those of Class I or having slight unscarred cracks appearing after harvesting is allowed. Within this tolerance not more than 0.5 per cent in total may consist of produce satisfying the requirements of Class II quality.

(ii) Class I

A total tolerance of 10 per cent, by number or weight, of asparagus not satisfying the requirements of the class but meeting those of Class II or having slight unscarred cracks appearing after harvesting 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, or of produce affected by decay.

(iii) Class II

A total tolerance of 10 per cent, by number or weight, of asparagus satisfying neither the requirements of the class nor the minimum requirements is allowed. Within this tolerance not more than 2 per cent in total may consist of produce affected by decay.

In addition to the above, 10 per cent, by number or weight, can be allowed for hollow shoots or shoots showing very slight cracks due to washing. In no case can there be more than 15 per cent hollow shoots in each package or bundle.

B. Size tolerances

For all classes (if sized): a total tolerance of 10 per cent, by number or weight, of asparagus not satisfying the requirements as regards sizing and deviating from the specified limits with a maximum deviation of 1 cm in length and 2 mm in diameter is allowed.

V. Provisions concerning presentation

A. Uniformity

The contents of each package or each bundle in the same package must be uniform and contain only asparagus of the same origin, quality, colour group and size (if sized).

However, a mixture of asparagus of distinctly different colours may be packed together in a package, provided they are uniform in quality and, for each colour concerned, in origin.

The visible part of the contents of the package or bundle must be representative of the entire contents.

B. Packaging

Asparagus must be packed in such a way as to protect the produce properly.

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.

Packages must be free of all foreign matter.

VI. Provisions concerning marking

Each package¹ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

A. Identification

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 authority².

¹ These marking provisions do not apply to sales packages presented in packages.

² 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

B. Nature of produce

- “Asparagus” followed by the indication “white”, “violet”, “violet/green”, or “green” if the contents of the package are not visible from the outside
- “Short” or “tips” where appropriate
- “Mixture of asparagus”, or equivalent denomination, in the case of a mixture of distinctly different colours of asparagus. If the produce is not visible from the outside, the colours and the quantity of each in the package must be indicated.

C. Origin of produce

- Country of origin³ and, optionally, district where grown, or national, regional or local place name.
- In the case of a mixture of distinctly different colours of asparagus of different origins, the indication of each country of origin shall appear next to the name of the colour concerned.

D. Commercial specifications

- Class
- Size expressed:
 - for asparagus subject to the uniformity rules as minimum and maximum diameters
 - for asparagus not subject to the uniformity rules, as minimum diameter followed by maximum diameter or the words “and over”
- The number of bundles or the number of unit packages for asparagus packed in bundles or unit packages.

E. Official control mark (optional)

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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.

equivalent abbreviations)” has to be indicated in close connection with the code mark, and the code mark should be preceded with the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin.

³ The full or a commonly used name should be indicated.