

# **UNECE STANDARD DDP-02**

concerning the marketing and  
commercial quality control of

## **WALNUT KERNELS**

**2017 EDITION**



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## NOTE

### Working Party on Agricultural Quality Standards

The commercial quality standards developed by the United Nations Economic Commission for Europe (UNECE) Working Party on Agricultural Quality Standards 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 new Standard for Walnut Kernels is based on document ECE/CTCS/WP.7/2017/8, reviewed and adopted by Working Party at its seventy-third session.

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# UNECE Standard DDP-02 concerning the marketing and commercial quality control of Walnut kernels

## I. Definition of produce

This standard applies to walnut kernels from varieties (cultivars) grown from *Juglans regia* L. intended for direct consumption or for food when intended to be mixed with other products for direct consumption without further processing. This standard does not apply to Walnut kernels that are processed by salting, sugaring, flavouring, or roasting or for industrial processing.

## II. Provisions concerning quality

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

However, if applied at stages following export, the holder/seller shall be responsible for observing the requirements of the standard. The holder/seller of products not in conformity with this standard may not display such products or offer them for sale, or deliver or market them in any other manner.

### A. Minimum requirements <sup>1</sup>

In all classes, subject to the special provisions for each class and the tolerances allowed, the walnut kernels must display the following characteristics:

The kernel must be:

- sound; produce affected by rotting or deterioration such as to make it unfit for human consumption is excluded
- clean; practically free of any visible foreign matter including the residues of adhering shell
- sufficiently developed. Shrunken or shriveled kernels which are extremely wrinkled, or with desiccated, dried out or tough portions affecting more than 25 per cent of the kernel, are to be excluded.
- free from blemishes, areas with discoloration (fat diffusion or spread stains) in pronounced contrast with the rest of the kernel affecting in aggregate more than 25 per cent of the surface of the kernel; scuffing is not regarded as a blemish.
- free from living pests, whatever their stage of development
- free from damage caused by pests, including the presence of dead insects and/or mites, their debris or excreta
- free from mould filaments visible to the naked eye

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<sup>1</sup> Definitions of terms and defects are listed in annex III of the Standard Layout – Recommended terms and definition of defects for standards of dry (Inshell Nuts and Nut Kernels) and dried produce.  
<[http://www.unece.org/trade/agr/standard/dry/StandardLayout/StandardLayoutDDP\\_e.pdf](http://www.unece.org/trade/agr/standard/dry/StandardLayout/StandardLayoutDDP_e.pdf)>

- free from rancidity
- free of abnormal external moisture
- free of foreign smell and/or taste.

The condition of the walnut kernels must be such as to enable them:

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

## **B. Moisture content <sup>2</sup>**

The walnut kernels shall have a moisture content not exceeding 5.0 per cent.

## **C. Classification**

In accordance with the defects allowed in section "IV. Provisions concerning tolerances", walnut kernels are classified into the following classes:

"Extra" Class, Class I and Class II.

The defects allowed must not affect the general appearance of the produce as regards quality, keeping quality and presentation in the package.

## **III. Provisions concerning sizing (styles)**

Walnut kernels are classified by style as follows:

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i	halves	kernels separated into two more or less equal and intact parts
ii	chipped kernels	A "chipped kernel" means a portion representing at least three-quarters of a "half"
iii	quarters	kernels separated lengthways into four more or less equal pieces
iv	large pieces	portions smaller than a "chipped kernel" but larger than a "broken piece"
v	broken pieces	portions of kernels which can pass through a 8mm round hole screen but not through a 3mm round hole screen

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- For halves only, the number of pieces per kilo is optional.
- When styles are mixed, the proportion of each style must be indicated; the table of size tolerances does not apply.

## **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 of the class indicated

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<sup>2</sup> The moisture content is determined by one of the methods given in annex II of the Standard Layout – Determination of the moisture content for dry produce  
<[http://www.unece.org/trade/agr/standard/dry/StandardLayout/StandardLayoutDDP\\_e.pdf](http://www.unece.org/trade/agr/standard/dry/StandardLayout/StandardLayoutDDP_e.pdf)>. The laboratory reference method shall be used in cases of dispute.

## A. Quality tolerances

<i>Defects allowed</i>	<i>Tolerances allowed percentage of defective produce, by weight</i>		
	<i>Extra</i>	<i>Class I</i>	<i>Class II</i>
(a) Tolerances for produce not satisfying the minimum requirements of which no more than:	4	6	8
Mouldy	0.5	1	2
Rancid or foreign smell or taste	1	1	2
Rotten or deterioration	0.5	1	2
Damaged by pests	1	1	2
Living pests	0	0	0
(b) Tolerances for other defects			
Foreign matter, shell fragments, fragments of hull	0.5	1	1
(c) Tolerances for colour			
Walnut kernels that do not belong to the same color classification	15	15	15

## B. Size/Style tolerances

Minimum percentage and tolerances allowed (per cent by weight of kernels)

Style	Halves	Chipped kernels	Quarters	Large pieces	Broken pieces	Fragments
Halves	85 <sup>a</sup>	15 <sup>b</sup>	5 <sup>c</sup>	5 <sup>c</sup>	1 <sup>c</sup>	1 <sup>c</sup>
<b>Chipped Kernels</b>		<b>85<sup>a</sup></b>	<b>15<sup>b</sup></b>	<b>5<sup>c</sup></b>	<b>5<sup>c</sup></b>	<b>1<sup>c</sup></b>
Quarters			85 <sup>a</sup>	15 <sup>b</sup>	5 <sup>c</sup>	1 <sup>c</sup>
Large pieces				85 <sup>a</sup>	15 <sup>b</sup>	1 <sup>c</sup>
Broken pieces				10 <sup>b</sup>	90 <sup>a</sup>	1 <sup>d</sup>

<sup>a</sup> *Minimum percentage*  
<sup>b</sup> *Tolerances allowed*  
<sup>c</sup> *Included in 15 per cent tolerance*  
<sup>d</sup> *Included in 10 per cent tolerance*

## V. Provisions concerning presentation

### A. Uniformity

The contents of each package must be uniform and contain only walnut kernels of the same origin, quality, size (if sized) and variety (if indicated).

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

### **Colour Uniformity<sup>3</sup>**

The following color uniformity apply in the respective classes

- Extra Class: Walnut kernels in this class must be uniformly light-coloured with practically no dark straw and/or lemon-yellow colour and with no dark brown.
- Class I: Walnut kernels in this class must be of a colour not darker than light brown and/or lemon-yellow.
- Class II: Walnut kernels in this class must be of a colour not darker than dark brown. Darker kernels may be marketed in this class, provided the colour is indicated on the package.
- Red coloured kernel varieties are exempted from the colour requirements.

## **B. Packaging**

Walnut kernels 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 in accordance with the table of tolerances in section “IV Provisions concerning tolerances”.

## **VI. Provisions concerning marking**

Each package<sup>4</sup> 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:

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>5</sup>

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<sup>3</sup> The official colour chart illustrating the colours is available at :  
[http://www.unece.org/fileadmin/DAM/trade/agr/standard/dry/Publications/ECE\\_DDP-02\\_WalnutKernels.pdf](http://www.unece.org/fileadmin/DAM/trade/agr/standard/dry/Publications/ECE_DDP-02_WalnutKernels.pdf)

<sup>4</sup> These marking provisions do not apply to sales packages presented in packages.

<sup>5</sup> The national legislation of a number of countries requires the explicit declaration of the name and address. However, in cases where a code mark is used, the reference “packer and/or dispatcher” (or equivalent abbreviations) must be indicated in close connection with the code mark, and the code mark should be preceded with the ISO 3166 alpha country code of the recognizing country, if not the country of origin.

**B. Nature of Produce**

- “Walnut Kernels”.

**C. Origin of produce**

- Country of origin<sup>6</sup> and, optionally, district where grown or national, regional or local place name.

**D. Commercial specifications**

- Class
- Style; when styles are mixed, the proportion of each style must be indicated.
- Number of halves per kg (optional)
- Crop year (optional)
- “Best before” followed by the date (optional).

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

Adopted 1983

Last revised 2017

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<sup>6</sup> The full or a commonly used name should be indicated.