

# **UNECE STANDARD DDP-12**

concerning the marketing and  
commercial quality control of

## **PINE NUT KERNELS**

**2013 EDITION**



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## NOTE

### Working Party on Agricultural Quality Standards

#### 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 Pine Nut Kernels is based on document ECE/TRADE/C/WP.7/2013/31, reviewed and adopted by the Working Party at its sixty-ninth session.

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## **UNECE Standard DDP-12**

### **concerning the marketing and commercial quality control of**

### **Pine Nut Kernels**

#### **I. Definition of produce**

This standard applies to decorticated pine nuts kernels of species (cultivars) grown from *Pinus pinea* L., *Pinus koraiensis*, *Pinus sibirica*, *Pinus yunnanensis*, *Pinus wallichiana*, *Pinus gerardiana* and *Pinus pumila*, intended for direct consumption or for food when intended to be mixed with other products for direct consumption without further processing<sup>1</sup>. This standard does not apply to pine nut kernels that are processed by salting, sugaring, or flavouring, or for industrial processing.

#### **II. Provisions concerning quality**

The purpose of the standard is to define the quality requirements of pine nut 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>2</sup>**

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

The kernels must be:

- intact; however, slight superficial damage is not considered as a defect
- 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
- sufficiently developed; no shrunken or shrivelled kernels which are extremely flat and wrinkled, or with desiccated, dried out or tough portions affecting more than 20 per cent of the kernel

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1 *Pinus armandii* and *Pinus massoniana* are excluded from this standard.

2 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 blemishes, areas of discolouration or spread stains in pronounced contrast with the rest of the kernel affecting in aggregate more than 10 per cent of the surface of the kernel
- well formed
- 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
- free from rancidity
- free of abnormal external moisture
- free of foreign smell and/or taste.

The condition of the pine nut 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>3</sup>**

Pine nut kernels should have a moisture content not exceeding 3.5 per cent, except for *Pinus pinea*, which should not exceed 6.0 per cent and *Pinus gerardiana*, which should not exceed 7.0 per cent.

## **C. Classification**

In accordance with the defects allowed in section “IV. Provisions concerning tolerances”, pine nut 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.

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<sup>3</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.

### III. Provisions concerning sizing

Sizing is optional. When sized, size is determined by count i.e. the number kernels per unit of weight according to the following table.

<i>Species</i>	<i>Size</i>	<i>Kernels per 100 grams</i>
<i>Pinus pinea, Pinus gerardiana</i>		600-700 more than 700
<i>Pinus koraiensis</i>	550 650	500-600 600-750
<i>Pinus sibirica</i>	850 1100	800-900 1000-1200
<i>Pinus yunnanensis</i>	850 1200	800-900 1000-1500
<i>Pinus wallichiana, Pinus griffithii</i>	400	350-550
<i>Pinus pumila</i>	1800	1700-2400

### 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.

#### A. Quality tolerances

<i>Defects allowed</i>	<i>Tolerances allowed percentage of defective produce, by number or 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	3	5	7
Not sufficiently developed, shrunken and shrivelled	1	3	5
Mouldy	0.5	0.5	1
Rancid or damaged by pests, rotting or deterioration	0.5	2	3
Living pests	0	0	0
Oily, mottled, yellow peak	1	2	2
Pine nuts in the germination stage	1	2	4
Pine nuts with superficial defects or traces of seed coat	2	4	6
(b) Size tolerances			
For produce not conforming to the size indicated, in total	5	10	10
(c) Tolerances for other defects			

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	<i>Tolerances allowed percentage of defective produce, by number or weight</i>		
Foreign matter- empty shell, loose shell, shell fragments, fragments of hull, dust (by weight) of which no more	0.05	0.05	0.05
Empty shells, loose shell (number of pieces in 2.5 kilograms)	1	1	1
Broken kernels	1	3	10
Pine nut kernels belonging to other species covered by this standard (excluding <i>Pinus pinea</i> )	2	5	5

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## **V. Provisions concerning presentation**

### **A. Uniformity**

The contents of each package must be uniform and contain only pine nut kernels of the same origin, quality, size (if sized) and species.

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

### **B. Packaging**

Pine nut 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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4 These marking provisions do not apply to sales packages presented in packages.

**B. Nature of produce**

- "Pine nut kernels"
- Botanical name of the species.

**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
- size expressed in accordance with section III
- crop year (optional)
- "Best before" followed by the date (optional).

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

Adopted 1993 (as UNECE Standard for Decorticated, Peeled Pine Nuts)

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5 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.

6 The full or commonly used name should be indicated