

Standard for Cashew Kernels

This standard was created by the Specialized Section on Standardization of Dry and Dried Produce of the United Nations Economic Commission for Europe (UNECE) with the help and recommendations of the International Nut and Dried Fruit Council (INC) and was adopted on 8 November 2012 as new UNECE recommendation for a one-year trial period under the title *UNECE Standard DDP-17 concerning the marketing and commercial quality control of Cashew Kernels*.

I. Definition of produce

This standard applies to cashew kernels obtained by heating, shelling and peeling the true fruits of the cashew tree *Anacardium occidentale* (L.). This standard does not apply to cashew kernels that are processed by salting, sugaring, flavouring, roasting or oil frying or to cashew kernels for industrial processing.

Cashew kernels may be presented in one of the following styles:

- Whole: whole kernels of characteristic shape, with more than 7/8th of the kernel intact. Kernels with no more than one eighth of kernel broken off are considered as whole.
- Broken: Kernels where one eighth or more of the original kernel is broken off. Designations of broken as follows:
 - Butts: Kernels of not less than 3/8th of a whole kernel, which have been broken crosswise, but the cotyledons are still naturally attached.
 - Splits: Kernels split lengthwise naturally, provided that no more than one eighth is broken off.
 - Pieces: Kernels, which have broken into more than two pieces.

II. Provisions concerning quality

The purpose of the standard is to define the quality requirements of cashew 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 ¹

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

- Intact; the presence of a small hole at the proximal end of the whole kernel or a central split or crack is not considered a defect;
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- free from damage affecting the appearance of the produce;
- clean, practically free from any visible foreign matter;
- free from living pests, whatever their stage of development;

¹ 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>.

- 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 any rancidity;
- free from spots in aggregate in excess of 3 mm on the kernels
- free from blemishes and areas of discoloration or spread stains in pronounced contrast with the rest of the kernel.
- free from adhering testa exceeding an aggregated area of 6 mm in diameter or shell liquid;
- free of abnormal external moisture;
- free of foreign smell and/or taste.

The condition of the cashew 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 ²

Cashew kernels shall have a moisture content not exceeding 5.0 per cent.³

C. Classification

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

"Extra" Class, Class I, and Class II.

<i>Class</i>	<i>Commercial designation</i>	<i>Description</i>
Extra	"white"	white, pale ivory, pale ash- grey, light yellow
Class I	"scorched" or "lightly blemished"	light brown, light ivory, light ash-grey, deep ivory. yellow
Class II	"scorched seconds" or "dessert"	light brown, amber, light blue, deep brown, deep blue, discoloured, black spotted, immature, blemished, and stained kernels are permitted.

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

² 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>. The Laboratory reference method shall be used in cases of dispute.

III. Provisions concerning sizing

Sizing is compulsory in "Extra class", but optional for "Class I" and "Class II".
Designation of sizes is as follows:

- Whole:

<i>Size code or count</i>	<i>Maximum number of kernels per pound</i>	<i>Maximum number of kernels per kilogram</i>
150	150	325
180	180	395
210	210	465
240	240	530
320	320	706
450	450	990
500	500	1100

- Pieces:

<i>Designation/Size code</i>	<i>Minimum size</i>
Large pieces:	not passing through a sieve of aperture 4.75mm
Small pieces:	not passing through a sieve of aperture 2.80mm.
Very Small Pieces:	not passing through a sieve of aperture 2.36mm.
"Baby bits" or "granules":	not passing through a sieve of aperture 1.70mm.

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

Defects allowed	Tolerances allowed, percentage of defective produce, by number or weight		
	Extra	Class I	Class II
a) Tolerance for cashew kernels not satisfying the minimum requirements	6	9	12
of which no more than:			
Not sufficiently developed, shrunken or shrivelled	1	2	not applicable
Mouldy, rancid, decay,	0.5	1	1
Damage by pests	0.5	1	1
Living pests	0	0	0
Superficial damage (whole kernels only)	1	2	5
Adhering testa	3	3	5
b) Size Tolerance, if sized			
or produce not conforming to the size indicated, in total:			
Wholes (by number)	10	10	10
Pieces (by weight) (smaller sizes)	10	10	10
c) Tolerance for other defects:			
Broken kernels (butts, splits and pieces) in wholes	10	10	10
Pieces in butts/splits	10	10	10
Kernels of a colour of the next lower class	5	5	not applicable
Foreign matter, loose shell fragments, loose testa fragments, dust (by weight)	[0.1	0.1	0.10]

V. Provisions concerning presentation

A. Uniformity

The contents of each package must be uniform and contain only cashew kernels of the same origin³, quality, style and size (if sized).

³ Since the process of de-shelling and peeling of inedible raw cashew nuts to produce edible cashew kernels is "significant transformation" the country where the raw cashews are shelled may be designated as country of origin.

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

B. Packaging

Cashew kernels must be packed in such a way so 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. Cashew kernels must be packed in hermitically sealed containers. 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 ⁴ 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 authority⁵.

B. Nature of produce

- "Cashew kernels"
- Style

C. Origin of produce

- Country of origin⁶ and, optionally, district where grown or national, regional or local place name

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

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

D. Commercial specification

- Class and/or commercial designation
- Size (if sized) expressed in accordance with section III
- Crop year (optional).

E. Official control mark (optional)
