

Draft *Indian Standard*  
**CASHEW KERNELS - SPECIFICATION**  
(*First Revision of IS 7750*)  
**ICS No. 67.080.10**

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Processed Fruits and Vegetable Products Sectional Committee, FAD10

## FOREWORD

(adoption clause will be added later)

Cashew kernels are extracted from cashew nuts by roasting, shelling and peeling. Extracted kernels are then graded.

This standard was first published in 1975. This first revision is being brought about to update and align the requirements of cashew kernels with specifications of Cashew Export Promotion Council (CEPC), laid down by the Government of India under the *Export (Quality Control and Inspection) Act, 1963*

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## 1 SCOPE

**1.1** This standard specifies requirements and methods of sampling and test for kernels obtained from cashew nuts (*Anacardium occidentale* Linnaeus).

## 2 REFERENCES

The following standard contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated.

*IS No.*

*Title*

460 : Part 1 : 1985

Specification for test sieves: Part I Wire cloth test sieves

4624 : 1978

Specification for Dehydrated Peas

### 3 REQUIREMENTS

**3.1 General Characteristics** — Cashew kernels shall be obtained through roasting, shelling and peeling cashew nuts (*Anacardium occidentale* Linnaeus). The kernels shall be reasonably dry. They shall have the characteristic shape. They may be either scorched or unscorched and in the form of wholes or pieces. Cashew kernels shall be completely free from rancid kernels.

**3.2 Visual examination** - Samples of cashew kernels should be tested for conformity with the requirements of this specification.

**3.3 Freedom from Moulds, Insects, etc** — Cashew kernels should be free from living insects and moulds and should be practically free from dead insects, insect fragments and rodent contamination visible to the naked eye (corrected if necessary, for abnormal vision) with such magnification as may be necessary in any particular case. If the magnification exceeds x 10, this fact should be stated in test report.

**3.4 Extraneous Matter** — Cashew kernels should be practically free from extraneous matter, such as stones, dirt or any other foreign matter.

#### 3.5 Moisture content

The cashew kernels shall have a moisture content not greater than 5 % (m/m) when determined according to the method given in Appendix A of IS 4624.

**3.6** The pesticide residues, heavy metals, aflatoxins etc., if any in the product shall not exceed the limit as prescribed in *Prevention of Food Adulteration Act, 1954* and the Rules made thereunder. Additionally, *Prevention of Food Adulteration Act, 1954* and *Standards of Weights and Measures Act, 1977* requirements wherever applicable has to be complied with.

**3.7 Grades** — The grade designations, trade names and characteristics of cashew kernels are given in Annex A.

### 4 PACKING AND MARKING

#### 4.1 Packing

**4.1.1** Cashew kernels should be packed in new, clean, dry and leak-proof containers and the containers shall be securely closed and sealed in such a manner that the cashew kernels remain in an inert atmospheric conditions inside the container.

#### 4.2 Marking

**4.2.1** The following particulars should be marked or labeled on each container:

- a) Name of the material;
- b) Name and address of the packer/manufacturer (as required by the buyer);
- c) Net quantity;
- d) Grade of the material;
- e) Name of the country, where packed; and
- f) Any other marking required by the purchaser.

## 4.2.2 BIS Certification Marking

The product may also be marked with the Standard Mark.

**4.2.2.1** The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

## 5 SAMPLING

**5.1** Representative samples of the material for testing conformity to this specification shall be drawn according to the method given in Appendix G of IS 4624.

### ANNEX A

(Clause 3.7)

#### GRADE DESIGNATIONS, TRADE NAMES AND CHARACTERISTICS OF CASHEW KERNELS

A-1 Cashew kernels – white wholes						
Grade designation	Trade name	Colour/ characteristics	Count/454 grams Size description	Maximum Moisture percentage	Broken Maximum (%)	NLSG NLG Maximum (%)
W-150	White Wholes	White/ pale ivory/ light ash. Characteristic shape.	130-150	5	5	5 (NLSG SW Together)
W-180	White Wholes	White/ pale ivory/ light ash. Characteristic shape.	160-180	5	5	5 (NLSG SW Together)
W-210	White Wholes	White/ pale ivory/ light ash. Characteristic shape.	200-210	5	5	5 (NLSG SW Together)
W-240	White Wholes	White/ pale ivory/ light ash. Characteristic shape.	220-240	5	5	5 (NLSG SW Together)
W-320	White Wholes	White/ pale ivory/ light ash. Characteristic shape.	300-320	5	5	5 (NLSG SW Together)
W-450	White Wholes	White/ pale ivory/ light ash. Characteristic shape.	400-450	5	5	5 (NLSG SW Together)
W-500	White Wholes	White/ pale ivory/ light ash. Characteristic	450-500	5	5	5(SW)

		shape.				
Remarks: Kernels shall be completely free from infestation, insect damage, mould, rancidity, adhering tests and objectionable extraneous matter. Scraped and partially shriveled kernels also permitted provided such scraping/ shriveling does not affect the characteristic shaper of the kernel.						
<b>A-2 Cashew kernels – scorched wholes</b>						
Grade designation	Trade name	Colour/ characteristics	Count/454 grams Size description	Maximum Moisture percentage	Broken Maximum (%)	NLSG NLG Maximum (%)
SW	Scorched Wholes	Kernels may be scorched/slightly darkened due to over-heating while roasting or drying in drier/borma	N.A.	5	5	7.5 (SSW)
SW-180	Scorched Wholes	Kernels may be scorched/slightly darkened due to over-heating while roasting or drying in drier/borma	170-180	5	5	7.5 (NLSG & SSW together)
SW-210	Scorched Wholes	Kernels may be scorched/slightly darkened due to over-heating while roasting or drying in drier/borma	200-210	5	5	7.5 (NLSG & SSW together)
SW-240	Scorched Wholes	Kernels may be scorched/slightly darkened due to over-heating while roasting or drying in drier/borma	220-240	5	5	7.5 (NLSG & SSW together)
SW-320	Scorched Wholes	Kernels may be scorched/slightly darkened due to over-heating while roasting or drying in drier/borma	300-320	5	5	7.5 (NLSG & SSW together)
SW-360	Scorched Wholes	Kernels may be scorched/slightly darkened due to over-heating while roasting or drying in	340-360	5	5	7.5 (NLSG & SSW together)

		drier/borma				
SW-450	Scorched Wholes	Kernels may be scorched/slightly darkened due to over-heating while roasting or drying in drier/borma	400-450	5	5	7.5 (NLSG & SSW together)
SW-500	Scorched Wholes	Kernels may be scorched/slightly darkened due to over-heating while roasting or drying in drier/borma	450-500	5	5	7.5 (SSW)

Remarks: Kernels shall be completely free from infestation, insect damage, mould, rancidity, adhering testa and objectionable extraneous matter. Scraped and partially shriveled kernels also permitted provided such scraping/shriving does not affect the characteristic shape of the kernel.

**A-3 Cashew kernels – dessert wholes**

Grade designation	Trade name	Colour/ characteristics	Count/454 grams Size description	Maximum Moisture percentage	Broken Maximum (%)	NLSG NLG Maximum (%)
SSW	Scorched wholes seconds	Kernels may be over-scorched, immature, shriveled ( <i>Pirival</i> ), speckled ( <i>Karaniram</i> ), discoloured and light blue	N.A.	5	5	7.5 (DW)
DW	Dessert wholes	Kernels may be deep scorched, deep brown, deep blue, speckled, discoloured and black spotted	N.A.	5	5	-

Remarks: Kernels shall be completely free from infestation, insect damage, mould, rancidity, adhering testa and objectionable extraneous matter.

**A-4 Cashew kernels – white pieces**

Grade designation	Trade name	Colour/ characteristics	Count/454 grams Size description	Maximum Moisture percentage	Broken Maximum (%)	NLSG NLG Maximum (%)
B	Butts	White/pale ivory or light ash. Kernels broken cross-wise	N.A.	5	5	5 (SB)

		(evenly or unevenly) naturally attached				
S	Splits	White/ pale ivory or light ash. Kernels split naturally lengthwise	N.A.	5	5	5 (SS)
LWP	Large White Pieces	White/ pale ivory or light ash	Kernels broken into more than two pieces and not passing through 4 mesh 16 SWG sieve/ 4.75 mm. IS Sieve ( <i>see</i> IS 460)	5	Nil	5 (SW & SP together)
SWP	Small White Pieces	White/ pale ivory or light ash	Broken Kernels smaller than those described on LWP but not passing through 6 mesh 20 SWG sieve/ 2.80 mm IS Sieve ( <i>see</i> IS 460)	5	Nil	5 (BB & SSP together)
BB	Baby Bits	White/ pale ivory or light ash	Plemules and broken kernels smaller than those described as SWP but not passing through a 10 mesh 24 SWG	5	Nil	1% (Cashew powder)

			Sieve/ 1.70 mm IS Sieve (see IS 460)			
Remarks: Kernels shall be completely free from infestation, insect damage, mould, rancidity, adhering testa and objectionable extraneous matter. Scraped and partially shriveled kernels also permitted provide such scraping/ shriveling does not affect the characteristic shape of the kernel.						
<b>A-5 Cashew kernels – scorched pieces</b>						
Grade designation	Trade name	Colour/ characteristics	Count/454 grams Size description	Maximum Moisture percentage	Broken Maximum (%)	NLSG NLG Maximum (%)
SB	Scorched Butts	Kernels broken crosswise (evenly or unevenly) and naturally attached. Kernels may be scorched/ slightly darkened due to over heating while roasting or drying un the drier/ borma.	N.A.	5	5	7.5 (DB)
SS	Scorched Splits	Kernels split naturally lengthwise. Kernels may be scorched/ slightly darkened due to over heating while roasting or drying un the drier/ borma.	N.A.	5	5	7.5 (DS)
SP	Scorched Pieces	Kernels may be scorched/ slightly darkened due to over heating while roasting or drying un the drier/ borma.	Pieces not passing through a 4 mesh 16 SWG sieve/ 4.75 mm IS sieve (see IS 460)	5	Nil	7.5 (SSP & SPS together)
SSP	Scorched Small Pieces	Kernels may be scorched/ slightly	Pieces smaller than SP	5	Nil	5 (DSP)

		darkened due to over heating while roasting or drying un the drier/ borma.	but not passing through a 6 mesh 20 SWG sieve/ 2.80 mm IS sieve ( <i>see</i> IS 460)			
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Remarks: Kernels shall be completely free from infestation, insect damage, mould, rancidity, adhering testa and objectionable extraneous matter. Scraped and partially shriveled kernels also permitted provide such scraping/ shriveling does not affect the characteristic shape of the kernel.

**A-6 Cashew kernels – dessert pieces**

Grade designation	Trade name	Colour/ characteristics	Count/454 grams Size description	Maximum Moisture percentage	Broken Maximum (%)	NLSG NLG Maximum (%)
SPS	Scorched Pieces Seconds	Kernels may be over-scorched, immature, shriveled ( <i>Pirival</i> ), speckled ( <i>Karaniram</i> ), discoloured and light blue	Kernels broken into pieces but not passing through a 4 mesh 16 SWG sieve/ 4.75 mm IS Sieve ( <i>see</i> IS 460)	5	Nil	7.5 (DP & DSP together)
DP	Dessert Pieces	Kernels may be deep scorched, deep brown, deep blue, speckled, discoloured and black spotted	Kernels broken into pieces but not passing through a 4 mesh 16 SWG sieve/ 4.75 mm IS Sieve ( <i>see</i> IS 460)	5	Nil	7.5 (DSP)

Remarks: Kernels shall be completely free from infestation, insect damage, mould, rancidity, adhering testa and objectionable extraneous matter.

NLSG denotes: Next Lower Size Grade. NLG denotes: Next Lower Grade.