
Dry split peas — Specification

Public Review Draft for comments only — Not to be cited as African Standard



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This African Standard was prepared by the ARSO Technical Committee on *Cereals, pulses and derived products* (ARSO/TC 12).

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Introduction

Split peas are an agricultural or culinary preparation consisting of the dried, peeled and split seeds of *Pisum sativum*. They are peeled, in that in addition to not being in the seed pod in which they grew, the splitting process also removes the dull coloured outer skin of the pea. They come in yellow and green varieties. The peas are round when harvested and dried. Once dry, after the skin is removed, the natural split in the seed's cotyledon can be manually or mechanically separated, in part to encourage faster cooking due to increasing the surface area exposed to heat.

Peas are part of the strategic food commodity basket recognized by the declaration of the African Union Food Security Summit held in December 2006 in Abuja, Nigeria. This standard was harmonized as part of the response by the resolution of the AU Food Security Summit to harmonize standards and grades for strategic food commodities as a means of promoting and facilitating intra-African food trade. Such facilitation would lead to free movement of food commodities from areas of surplus to areas of deficit, leading to overall achievement of food and nutrition security, food self-sufficiency and socioeconomic development of the African continent.

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1 Scope

This African Standard specifies the requirements and methods of sampling and test for dry split peas of varieties (cultivars) grown from *Pisum sativum* L. and *Pisum sativum* var. *arvense* L. intended for human consumption.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ARS 53, *General principles of food hygiene — Code of practice*

ARS 56, *Pre-packaged foods — Labelling*

ARS 869, *Dry whole peas — Specification*

AOAC Official Method 999.10:1999, *Determination of lead, cadmium, copper, iron and zinc in foods — Atomic absorption spectrophotometry after microwave digestion*

AOAC Official Method 999.11:1999, *Determination of lead, cadmium, copper, iron and zinc in foods — Atomic absorption spectrophotometry after dry ashing*

CODEX STAN 193, *Codex general standard for contaminants and toxins in food and feed*

ISO 605, *Pulses — Determination of impurities, size, foreign odours, insects, and species and variety — Test methods*

ISO 6579, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Salmonella spp.*

ISO 6888-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 1: Technique using Baird-Parker agar medium*

ISO 6888-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 2: Technique using rabbit plasma fibrinogen agar medium*

ISO 6888-3, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) — Part 3: Detection and MPN technique for low numbers*

ISO 7251, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of presumptive Escherichia coli — Most probable number technique*

ISO 21527-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of yeasts and moulds — Part 2: Colony count technique in products with water activity less than or equal to 0.95*

ISO 24333, *Cereals and cereal products — Sampling*

ISO 24557, *Pulses — Determination of moisture content — Air-oven method*

3 Terms and definitions

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For the purpose of this standard the following definitions shall apply.

3.1

split peas

threshed seeds of the garden type pea plant (*Pisum sativum* L. and *Pisum sativum* var. *arvense* L.), which have been split into halves or smaller pieces

3.2

bleached split peas

green-coloured varieties which are bleached distinctly yellow in colour or split peas of yellow-coloured varieties which are bleached distinctly green in colour

3.3

contrasting split peas

split peas which are of a colour contrasting with the predominating class of split peas.

Note 1 to entry: Bleached split peas of the predominating class shall not be considered as contrasting split peas.

3.4

damaged split peas

split peas which are distinctly damaged by frost, weather, disease, heat (other than to a material extent), or other causes (except weevil or material heat damage), or are distinctly soiled or stained by nightshade, dirt, or toxic material.

3.5

defective split peas

weevil-damaged split peas, heat-damaged split peas, damaged split peas, contrasting split peas, whole peas, white caps, and bleached split peas

3.6

foreign matter

all organic and inorganic material (such as plant parts, sand, soil, glass, filth) other than peas

3.7

poisonous, toxic and/or harmful seeds

any seed which if present in quantities above permissible limit may have damaging or dangerous effect on health, organoleptic properties or technological performance such as Jimson weed — *Datura* (*D. fastuosa* L. and *D. stramonium* L.) corn cockle (*Agrostemma githago* L., *Machai Lallium remulenum* L.) Akra (*Vicia* species), *Argemone mexicana*, Khesari and other seeds that are commonly recognized as harmful to health

3.8

white caps

split peas with seed coats attached

3.9

food grade packaging material

packaging material, made of substances which are safe and suitable for their intended use and which will not impart any toxic substance or undesirable odour or flavour to the product

4 Requirements

4.1 Raw materials

The dry whole peas from which the dry split peas are obtained shall comply with the requirements of ARS 869.

4.2 General requirements

Dry split peas shall be:

- a) hard, clean and uniform in colour;
- b) free from substances which render them unfit for human consumption;
- c) free from abnormal flavours, musty, sour or other undesirable odour, obnoxious smell and discolouration; and
- d) free from micro-organisms and substances originating from micro-organisms, or other poisonous or deleterious substances in amounts that may constitute a hazard to human health.

4.3 Specific requirements

4.3.1 Grading

Dry split peas may be graded into three grades on the basis of the tolerable limits established in Table 1 which shall be additional to the general requirements set out in this standard.

Table 1 — Specific requirements

Characteristics		Limits			Method of test
		Grade 1	Grade 2	Grade 3	
(1)	Moisture, % max m/m	14.0 [13]	14.0 [13]	14.0 [13]	ISO 24557
(2)	Purity, % min. m/m	99.5 [99]	99	99	ISO 605
(3)	Foreign matter, % max m/m	0.2	0.3	0.5	ISO 605
(4)	Inorganic matter, % max m/m	0.1	0.2	0.3	
(5)	Whole peas, % max m/m	0.5	1.0	2.0	
(6)	Pest damaged peas, % max m/m	0.5	1.0	1.5	
(7)	Heat damaged peas, % max m/m	0.2	0.5	1.0	
(8)	Contrasting peas% max m/m	0.5	1.0	2.0	
(9)	White caps peas% max m/m	1.5	3.0	5.0	
(10)	Total defective peas, % max m/m	3	5	7	
(11)	Bleached peas% max m/m	1.5	3.0	5	
(12)	Filth, % max m/m	0.1	0.1	0.1	
(13)	Total aflatoxin (AFB1+AFB2+AFG1 +AFG2)), ppb, max	10			ISO 16050
(14)	Aflatoxin B1 only, ppb, max	5			
(15)	Fumonisin, ppm, max	2			AOAC 2001.04
NOTE 1 The parameter, total defective grains is not the sum total of the individual defects. It is limited to 70% of the sum total of individual defects.					
NOTE 2 Dry split peas destined for processing baby foods shall have total aflatoxin level of not more than 4 ppb.					

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5 Contaminants

5.1 Heavy metals

Dry split peas shall comply with those maximum limits for metal contaminants specified in CODEX STAN 193 and in particular those listed in Table 2.

Table 2 — Metal contaminants

S/N	Parameter	Limit (mg/kg max)	Test method
(1)	Lead (Pb)	0.1	AOAC 999.11 or AOAC 999.10
(1)	Cadmium (Cd)	0.1	AOAC 999.11 or AOAC 999.10

5.2 Pesticide residues

Dry split peas shall comply with those maximum pesticide residue limits established by the Codex Alimentarius Commission for this commodity.

6 Hygiene

Dry split peas shall be produced and handled under hygienic conditions in accordance with ARS 53.

7 Packaging

7.1 Dry split peas shall be packaged in suitable food grade packaging materials which shall be clean, sound, free from insect, fungal infestation and the packaging material shall be of food grade quality and shall be securely closed and sealed.

7.2 Dry split peas shall be packaged in food grade packaging materials which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the products.

7.3 Each package shall contain dry split peas of the same type and of the same grade designation.

8 Labelling

8.1 General

The following specific labelling requirements shall apply and shall be legibly and indelibly marked in accordance with the requirements of ARS 56:

- (i) product name as “Dry split peas”;
- (ii) Variety;
- (iii) grade;
- (iv) name, address and physical location of the producer/ packer/importer;
- (v) lot/batch/code number;
- (vi) net weight, in SI units;
- (vii) the declaration “Food for Human Consumption”
- (viii) storage instruction as “Store in a cool and dry place away from any contaminants”;
- (ix) crop year;

- (x) packing date;
- (xi) instructions on disposal of used package;
- (xii) country of origin;
- (xiii) a declaration on whether the dry split peas were genetically modified or not.
- (xiv) 'best before' date

8.2 Labelling of non-retail containers

Information detailed in 8.1 shall be given either on the container or in accompanying documents, except that the name of the product, lot identification and the name and address of the processor or packer as well as storage instructions, shall appear on the container.

For products purchased for use by the buyer/retailer, at least the name of producer, lot number and/or 'crop year' shall be indicated on the container.

Lot identification and the name and address of the processor or packer may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.

9 Sampling methods

Sampling shall be done in accordance with the ISO 24333.

Bibliography

EAS 761:2012, *Dry split peas — Specification*

United States Standards for Dry Split Peas, Effective July 15, 2009

Australian Pulse Standards, 2012/2013: *Peas — Yellow split minimum export standard*

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