



Technical Specifications for MALAWI PIGEON PEAS

Specification reference: Pigeon Peas, MBS:1995

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1. SCOPE

This specification applies to origin Malawi shelled dry **Pigeon Peas** *Cajanus cajan L.* (**Peas**) purchased and distributed by WFP.

2. DEFINITION

Foreign matter shall mean all foreign matter of organic and inorganic nature such as seed-coats, part of stem, pods, leaves, other crop seeds and weed seeds, or inorganic matter such as earth, sand, dust, stones etc.

Stones shall mean concrete earthy or minerals matters, and other substances of similar hardness that do not disintegrate readily in water.

Damaged peas shall mean pigeon peas and pieces of pigeon peas that are damaged by frost, weather, disease, weevils or other insects and pests or other causes. It shall also include broken peas and those with cracked seed coats.

Shriveled pigeon peas shall mean dry peas that are distinctly shriveled in contrast to the natural appearance of the designated class of pigeon peas.

Contrasting classes shall mean pigeon peas that are of a different colour from peas of the designated class.

Split shall mean pigeon peas that are split into halves or smaller pieces and the halves of which are loosely held together.

Admixture shall mean seeds of other crops other than pigeon peas.

3. REFERENCE

Codex Standard for certain pulses grains (Codex Stan 171-1989, rev. 1-1995).

Malawi standard- Pigeon peas standard_MBS 400-1995.

4. PRODUCT SPECIFICATION

4.1 General requirements

- | | |
|------------------------|---|
| • Organoleptic: | Clean and bright appearance, Natural odour |
| • Moisture content: | 12.0% max. |
| • Foreign matters: | 2.0% max. m/m |
| • Damaged peas: | 1.0 % max. m/m |
| • Shriveled peas: | 2.0 % max. m/m |
| • Weevil damaged peas: | 1.0 % max. m/m |

- Contrasting peas: **1.0 % max. m/m**
- Split: **1.0 % max. m/m**
- Admixtures: **1.0 % max. m/m**
- Live insect: **Nil**
- GMO (*only if required*): **Negative (< 0.9% of GMO material)**
- Crop year: **As per contractual agreement**

4.2 Toxic or noxious seeds

The product covered by the provisions of this specification shall be free from the following toxic or noxious seeds in amounts which may represent a hazard to human health.

- *Crotalaria* (*Crotalaria* spp.), Corn cockle (*Agrostemma githago* L.), Castor bean (*Ricinus communis* L.), Jimson weed (*Datura* spp.), and other seeds that are commonly recognized as harmful to health.

4.3 Contaminants

4.3.1 Heavy metals

Peas shall be free from heavy metals in amounts which may represent a hazard to health.

4.3.2 Pesticide residues

Peas shall comply with those maximum residue limits established by the Codex Alimentarius Commission for this commodity.

4.3.3 Mycotoxins

Peas shall comply with those maximum mycotoxin limits established by the Codex Alimentarius Commission for this commodity.

Peas shall not contain more than 3mcg/kg aflatoxin.

4.4 Hygiene

4.4.1 It is recommended that the product covered by the provisions of this specification be prepared and handled in accordance with the appropriate sections of the *Recommended International Code of Practice – General Principles of Food Hygiene* (CAC/RCP 1-1969), and other Codes of Practice recommended by the Codex Alimentarius Commission which are relevant to these products.

4.4.2 To the extent possible in good manufacturing practice, the products shall be free from objectionable matter.

4.4.3 When tested by appropriate methods of sampling and examination, the products:

- shall be free from micro-organisms in amounts which may represent a hazard to health;
- shall be free from parasites which may represent a hazard to health; and
- shall not contain any substance originating from micro-organisms in amounts which may represent a hazard to health.

5. PACKAGING AND MARKING

As per contractual agreement.

6. STORING

Peas must be stored under dry, ventilated and hygienic conditions.

7. SAMPLING REQUIREMENTS

Representative samples can be drawn according to international sampling method standards at the bagging section or in the warehouse.

For packed units, sampling frequency and reference method are showed in *table 1*. One laboratory samples of 3 kg is required by lot or sub-lot of 500MT maximum.

For the bulk (static and flowing), the sampling must follow the rules described in paragraphs 5.2 of ISO 24333-2009.

Table 1: Sampling rules

Lot or sub-lot size (MT)	Number of increment	Place of sampling	Reference (or equivalent)
≤100	3 % of bags and minimum 50 bags (e.g. 60 increments for a lot of 100 MT, packed in 50 kg bag)	Warehouse or during production	GAFTA 124-2
101-500	3 % of bags <i>Examples:</i> - 120 increments for a lot of 200 MT, packed in 50 kg bag - 180 increments for a lot of 300 MT, packed in 50 kg bag - 240 increments for a lot of 400 MT, packed in 50 kg bag - 300 increments for a lot of 500 MT, packed in 50 kg bag		

7. ANALYTICAL REQUIREMENTS

The principal tests in table 2 must be performed in order to check if the quality of the Peas meets above requirements. Additional analyses shall be defined in case of further quality assessment.

Table 2: List of compulsory tests and reference methods

No	Analyses/tests	Limit	Reference method (or equivalent)
1	Organoleptic	Clean and bright appearance, Natural odour	Organoleptic examination
2	Moisture content	12.0% max.	ISO 712: 2009
3	Foreign matters	2.0% max. m/m	Visual examination
4	Damaged peas	1.0 % max. m/m	Visual examination
5	Shrivelled peas	2.0 % max. m/m	Visual examination
6	Weevil damaged peas	1.0 % max. m/m	Visual examination
7	Contrasting peas	1.0 % max. m/m	Visual examination
8	Split	1.0 % max. m/m	Visual examination
9	Admixtures	1.0 % max. m/m	Visual examination
10	Aflatoxin	3 mcg/kg max.	AACC 45-16
11	Live insect	Nil	
12	Crop year	As per contractual agreement	
13	GMO (only if required)	Negative (< 0.9% of GMO material)	