



Technical Specifications for **TURKEY CHICK PEAS**

Specification reference: **Turkey Chick Peas**

Version: **V1.0**

Date of issue: **24th March, 2011**

1. SCOPE

This specification applies to origin Turkey **Chick Peas** purchased by WFP.

2. DEFINITION

Broken kernels are chick peas pieces which occur by splitting of chick peas kernels into 2 or more pieces and which stays on a 5 mm round hole sieve after sieving.

Foreign matters are all kind of material present in or between the chick peas kernels which are different from chick peas and visible by naked eye. **Foreign matters** include other classes of chick peas, other grains and seeds, ergot, mineral matter, stones and earth pellets, excreta and other matter than chick peas which remain on the sieve.

Other type kernels include kernels with types which are not specified on the packing.

Size B (large) grains are kernels passing from round hole sieve with 9mm core diameter but staying on round hole sieve with core diameter 8mm (29-30 calibre).

Spoilt kernels include whole or split chick peas which are mouldy, decayed, stained, lost its characteristic colour, taste and smell, sprouted, holed or eaten by insects or other pests to the level that can be seen with naked eye and also unmaturred green chick peas kernels or pieces.

3. REFERENCE

Codex Standard for Certain Pulses (Codex Stan 171-1989, rev. 1-1995).

Turkish Standards for Chick Peas TS 142- 2008.

4. PRODUCT SPECIFICATION

4.1 General requirements

- Moisture: **12 % max**
- Foreign matter: **1 % max** by weight
- Size: **8-9 mm, 90% min** by weight (Turkish standard size **B**)
- Undersize: **3 % max** by weight
- Spoilt kernels: **3 % max** by weight
- Broken: **3 % max** by weight
- Mixing ratio: **10% max** by weight
- Goat and unmaturred: **5% max** by weight
- Cooking time: **60-90 minutes** after 24 h soaking
- Organoleptic: **Natural taste, smell and color**
- Live insects: **Nil**

If required by recipient country, **Chick Peas** needs to be obtained from non-genetically modified varieties.

4.2 Contaminants and Toxins

Chick Peas shall not contain contaminants and toxins in amounts which may represent a hazard to human health. Specific limit of some contaminants and toxins is presented in table 1.

Table 1: Limit of contaminants and toxins

No	Contaminant and toxin	Limit
<i>Heavy metal</i>		
1	Arsenic (As)	0.10 ppm max.
2	Copper (Cu)	2.0 ppm max.
3	Lead (Pb)	0.10 ppm max.
4	Cadmium (Cd)	0.02 ppm max.
5	Mercury (Hg)	0.01 ppm max.
<i>Pesticide residues</i>		
6	Carbamate	< 10 ppb
7	Organochlorine	< 10 ppb
8	Organophosphorus	< 10 ppb
9	Pyrethroid	< 10 ppb
<i>Toxic or noxious seeds</i>		
10	Crotolaria (Crotolaria spp.)	Free
11	Corn cockle (Agrostemma githago L.)	Free
12	Castor bean (Ricinus communis L.)	Free
13	Jimson weed (Datura spp.)	Free
<i>Radiation</i>		
14	Radiation	10 Bq/Kg max.
<i>Mycotoxins</i>		
15	Aflatoxin (total B1+B2+G1+G2)	20 ppb max.
16	Fumosin	5 ppb max.
17	Zearalenone	100 ppb max.
18	Ochratoxin A	5 ppb max.

5. PACKAGING AND MARKING

Chick Peas grains shall be packed in new uniform strong polypropylene bag of a net content of 50 kg, fit for export and multiple handing.

The bag should be marked the following information

- Name of the product:
- Net content:
- Name and address of the supplier (including country of origin).
- Additional marking as per contractual agreement.

6. STORING

Chick 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 2*. One laboratory samples of 10 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 and 5.3 of ISO 24333-2009.

Table 2: Sampling rules

Lot or sub-lot size (MT)	Number of increment	Place of sampling	Reference
≤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
101-200	3 % of bags (e.g. 120 increments for a lot of 200 MT, packed in 50 kg bag)		
201-300	3 % of bags (e.g. 180 increments for a lot of 300 MT, packed in 50 kg bag)		
301-400	3 % of bags (e.g. 240 increments for a lot of 400 MT, packed in 50 kg bag)		
401-500	3 % of bags (e.g. 300 increments for a lot of 500 MT, packed in 50 kg bag)		

7. ANALYTICAL REQUIREMENTS

The principal analyses in table 3 must be performed in order to check if the quality of the **Chick Peas** meets above requirements. Additional analyses shall be defined in case of further quality assessment.

Table 3: List of compulsory analyses and reference methods

No	Parameters	Recommended level	Reference methods*
1	Moisture:	12 % max	ICC No 110
			ISO 712-2009
2	Foreign matter	1 % max by weight	ISO 2591-1
3	Size	8-9 mm, 90% min by weight	ISO 2591-1
4	Undersize	3 % max by weight	ISO 3310-2
5	Spoilt kernels	3 % max by weight	ISO 3310-2
6	Broken	3 % max by weight	ISO 3310-2
7	Mixing ratio	10% max by weight	ISO 3310-2
8	Goat and unmaturred	5% max by weight	ISO 3310-2
9	Cooking time	60-90 minutes after 24 h soaking	
10	Organoleptic	Natural taste, smell and color	
11	Live insect	Nil	<i>Visual</i>
12	Aflatoxin	20 ppb	ISO 16050
13	GMO (Only if required)		

* *Or equivalent*