



## Technical Specifications for: WHOLE CHICKPEAS

**Version:** 2

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**FOSTER Reference:** FS00055

**Key updates:**

- Specification aligned with new template

### 1. Introduction

**Product name (hereafter called the product):**

Whole Chickpeas

**General description:**

This specification applies to the product distributed generically by WFP.

**Definitions and other introductory details:**

- TOTAL DAMAGED: damaged chickpeas are sprouted, frost damaged, heated, damaged by insects (excluding grains decayed with holes), distinctly deteriorated or discoloured by weather or by disease, or that are otherwise damaged in a way that seriously affects their quality. This excludes broken chickpeas.
- SEEDS WITH SERIOUS DEFECTS: seeds in which the cotyledons have been affected or attached by pests; seeds with very slight traces of mould or decay; or slight cotyledon staining.
- IMMATURE SEEDS (WRINKLED/SHRUNK): chickpeas that are immature which are hard and have wrinkled surface and low water absorbance.
- INSECT DAMAGED: any chickpeas which has been distinctively damaged by insects or pests, and consequently got decayed and shows holes.
- BROKEN OR SPLIT: split and broken chickpeas are chickpeas in which the cotyledons are separated, or one cotyledon has been broken in any size.
- FILTH: impurities of animal origin, including dead insects.
- TOXIC-NOXIOUS SEEDS: any seeds which if present in quantities in amount which may have damaging or dangerous effect on health, organoleptic properties or technological performance such as Jimson weed —datura (D. fastuosa Linn and D. stramonium Linn.) corn cockle (Agrostemma githago L., Machai Lallium remulenum Linn.) Akra (Vicia species), Argemone mexicana, Khesari, Bellardia spp. (except Bellardia Trixago), Coronopus Didymus, Solanum Carolinense, Solanum Heterodoxum, Solanum Rostratum, Striga spp., and other seeds that are commonly recognized as harmful to health.
- INORGANIC MATTER: includes metallic pieces, shale, glass, dust, sand, gravel, stones, dirt, pebbles, lumps or earth, clay, mud.
- FOREIGN MATTER: mineral or organic matter (dust, twigs, seedcoats, seeds of other species, dead insects, fragments, or remains of insects, other impurities of animal origin) other than chickpeas or part of chickpeas.
- MOULDY AND SPROUTING SEEDS: mouldy chickpeas are grains with visible mycelial growth on their surface and have bad smell; Chickpeas are considered sprouted when the seed coat splits and the primary root emerges from between

the cotyledons.

- OTHER EDIBLE SEEDS (FOREIGN SEEDS): edible seeds from other plants (wheat, barley, corn, Lentils, peas, etc.).
- DISCOLOURED: includes chickpea which are distinctly blemished and/or off colour from the characteristic colour of the predominating class.
- OTHER COLOUR SEEDS: all sound chickpeas grains whose colour is different than colour of the designated chickpeas (beige or light brown), and those with green spots either on surface or inside.

**The following aspects are as per contract:**

- GMOs-related requirements
- Shelf-life
- Specific labelling requirements
- Colour of the product
- Specific product net weight
- Specific packaging type selected from options in applicable packaging specification only
- Radiation requirements

## **2. Standards**

Except when specified otherwise in the contract, the raw materials, the manufacture, testing, packaging and labelling, of the product shall be in strict compliance with the specifications set forth herein, and with the latest edition of the following standards/guidelines (whichever is stricter). Supplier shall not deviate in any way from the specifications without WFP's prior written consent.

Codex Texts can be found in the following webpages:

- Standards: <https://www.fao.org/fao-who-codexalimentarius/codex-texts/list-standards/tr/>;
- Codes of practice: <https://www.fao.org/fao-who-codexalimentarius/codex-texts/codes-of-practice/en/>;
- Guidelines: <https://www.fao.org/fao-who-codexalimentarius/codex-texts/guidelines/tr/>;
- Maximum Residue Limits (MRLs) and Extraneous Maximum Residue Limits (EMRLs) for pesticides: <https://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/>;
- Additionally, Guidelines of International Commission on Microbiological Specifications for Foods can be found here: <https://www.icmsf.org/publications/books/>.

### **Applicable Standards**

- CODEX GENERAL PRINCIPLES OF FOOD HYGIENE (CXC 1-1969)
- CODEX GENERAL STANDARD FOR CONTAMINANTS AND TOXINS IN FOOD AND FEED (CXS 193-1995)
- CODEX MAXIMUM RESIDUE LIMITS (MRLs) AND CODEX EXTRANEIOUS MAXIMUM RESIDUE LIMITS (EMRLs) FOR PESTICIDES
- RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES FOR COMPLIANCE WITH MRLS (CXG 33-1999)
- CODEX STANDARD FOR CERTAIN PULSES (CXS 171-1989)
- Foods destined for Syria shall comply with the national Decree # 158 dated 25/4/2017 by Syrian Ministry of Agriculture, including the annexes (e.g. requirements for quarantine and nonquarantine pests and weed seeds).

## **3. Product Specifications**

- The product's organoleptic characteristics shall be characteristics of the designated product.
- The product shall meet the testing requirements stated in this document.
- Unless otherwise specified, the product quality shall be uniform and practically free of foreign materials, non-target grains/seeds (especially toxic seeds) and soil residues. This is typically accomplished using validated and maintained mechanical cleaning processes such as sieving, gravity separation, aspiration and others (as appropriate). Using of sorted waste materials and residuals resulting from cargo manipulation/cleaning, which can contain pockets of concentrated defective products, filth, and/or toxic seeds, is prohibited (e.g., tailings, sweepings, sorted wastes).
- The producer shall be authorized by competent governmental authorities to process products for human consumption and to export. The authorization of export is only required when the producer supplies WFP internationally.

- GMOs-related requirements shall be as per contract. When non-GMOs or GMOs-free requirements are made in the contract without specifying a maximum limit, the product is considered as acceptable if it contains, consists of or is produced from materials with traces of authorized GMOs in a proportion no higher than 0.9% (if the product is not consisting of a single ingredient the limit shall be applied to each ingredient considered individually), provided that GMOs presence is adventitious or technically unavoidable, in accordance with Regulation (EC) No 1829/2003 (the latest version in force). Operators must be in a position to supply evidence to satisfy the competent authorities that they have taken appropriate steps to avoid the presence of such material. The EU register of authorised GMOs is available at <https://webgate.ec.europa.eu/dyna2/gm-register/>.

#### **4. Product Safety**

- The product shall not contain any harmful substances including, but not limited to, micro-organisms, heavy metals, pesticides, mycotoxin, foreign matter or anti-nutritional factors, in amounts that may represent a hazard to health. Where there is no applicable standard available, The Joint FAO/WHO Expert Committee on Food Additives (JECFA) and The European Food Safety Authority (EFSA) evaluations shall be considered for guidance limits.
- Fit for human consumption guarantee: Suppliers shall manage the quality of their product and guarantee that the product is 'fit for human consumption' and in line with TIC Council/IFIA Guidelines\*.
- The product shall comply strictly with Codex General Standard for Contaminants and Toxins in Food and Feed (CXS 193-1995), Codex Maximum Residue Limits (MRLs) and Codex Extraneous Maximum Residue Limits (EMRLs) for Pesticides and Guidelines of International Commission on Microbiological Specifications for Foods\*\*.
- The product shall be free from toxic or noxious seeds in amounts which may represent a hazard to human health. This includes *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. A non-exhaustive list of these seeds can be found in ISO 7970.

Link of references mentioned above:

\*[http://www.ifia-federation.org/content/wp-content/uploads/Fit\\_for\\_Human\\_Consumption\\_Bulletin\\_Rev\\_4.pdf](http://www.ifia-federation.org/content/wp-content/uploads/Fit_for_Human_Consumption_Bulletin_Rev_4.pdf).

\*\*<https://www.icmsf.org/publications/books/>.

#### **5. Shelf life**

- When shelf life is requested in the contract, products shall have a minimum of 80% of shelf-life remaining when presented to WFP for inspection, unless otherwise authorized by WFP.

**Shelf-Life Duration:** n/a months

#### **6. Packaging and Marking**

When a WFP contract requires break-bulk delivery and/or empty packaging to be delivered with food, the product packaging, marking and stuffing of containers shall comply with the following specification:

<https://docs.wfp.org/api/documents/WFP-0000140775/download/>

Templates for packaging artwork are available in the specification above and additional labelling requirements shall be as per contract.

#### **Other information on packaging and labelling:**

- The applicable packaging is without PE inner liner, unless otherwise specified in the contract.
- The following sentence shall be labelled in bold letters: "Allergen statement: may contain wheat, soybeans, barley, oats and rye."

#### **7. Technical document requirements**

When required, suppliers shall submit a Certificate of Analysis of the final product to WFP, along with other documents for payment. Additionally, suppliers shall provide other technical documents upon request from WFP.

## 8. Analytical Requirements

Suppliers shall follow their own food safety and quality management plan. WFP can conduct tests on products as per the Table below. Additionally, WFP reserves the rights to change this testing plan at any time.

Any products taken for the purpose of weight check and lab testing (including retention samples) shall be replenished by the suppliers. The shipment quantity shall not be less than the purchased quantity. Where non-destructive inspection is done, suppliers shall close the package or replace it.

In addition to the pre-delivery Q&Q inspection, WFP can also perform prior-assessment (e.g., documentation check, production monitoring, audits, assessment of raw materials, etc.).

Suppliers acknowledge that any prior-assessment by WFP or its designated inspection agents does not constitute a determination whether the specifications for the foods set out in this document or any purchase order (including mandatory technical requirements) have been met. Suppliers will be required to comply with their warranty and other contractual obligations whether or not WFP carries out such prior assessment.

The prior-assessment undertaken by WFP or its designated inspection agents will not substitute for the pre-delivery Q&Q inspection and testing of the goods upon delivery to WFP.

The body of the specification shall be considered in order to verify if any additional requirement is applicable to the specific purchase.

Unless otherwise specified, all analysis requirements refer to the product as sold.

### Quantitative Requirements

Test Name	Unit	Min	Max	Reference methods (latest versions) *	Test Type
Aflatoxin B1	ppb	0	2	ISO 16050; EN 12955	Type A
Aflatoxins total (B1+B2+G1+G2)	ppb	0	4	ISO 16050	Type A
Broken/split seeds	%	0	2	ISO 605	Type A
Cadmium (Cd)	ppm	0	0.1	AOAC 2013.06	Type A
Cooking time	minutes	0	90	After soaking for 24 hours	Type A
Dead insects (whole or fragment)	%	0	0.1	ISO 605	Type A
Discoloured seeds	%	0	3	ISO 605	Type A
Filth	%	0	0.1	ISO 605	Type A
Foreign matter	%	0	1	ISO 605	Type A
Seeds from other kinds of chickpeas	%	0	4	ISO 605	Type A
Immature seeds (wrinkled/shrunk)	%	0	4	ISO 605	Type A
Inorganic matter	%	0	0.2	ISO 605	Type A
Insect damaged seeds	%	0	0.3	ISO 605	Type A
Lead (Pb)	ppm	0	0.1	AOAC 2013.06	Type A
Moisture	%	0	14	ISO 24557	Type A
Other colour seeds (other than discolored seeds)	%	0	3	ISO 605	Type A
Other edible seeds	%	0	1	ISO 605	Type A
Seed size ( $\geq 6$ mm diameter)	%	95	100	ISO 605	Type A
Seeds with serious defects	%	0	1	ISO 605	Type A
Total damaged seeds	%	0	4	ISO 605	Type A
Mouldy and sprouting seeds	%	0	0	ISO 605	Type A
Toxic-noxious seeds	%	0	0	Visual examination on 3 kg sample	Type A
Live insects	%	0	0	ISO 605	Type A


\* or equivalent validated methods meeting the requirements of EN ISO 16140-2

### Qualitative Requirements

Test Name	Requirements	Reference methods (latest versions) *	Test Type
Organoleptic characteristics (texture, appearance, smell, taste)	Bright and clear appearance, Normal smell and colour	Organoleptic evaluation	Type A
Yeasts and moulds	n=5, c=2, m=1,000, M=10,000	ISO 21527-2	Type B
Radiation	Maximum 10 Bq/kg (Only for foods originated from Ukraine & Russia or as per contract)	WEAC.RN.METHOD3.0 (Cs and other) (Cs137&134)	Type B

\* or equivalent validated methods meeting the requirements of EN ISO 16140-2

- All nonquarantine weed seeds listed in Syrian Decree # 158 shall be reported (e.g. Hordeum vulgare, Brassica ssp. and Polygonum convolvulus)