

## Technical Specifications for:



World Food Programme

### BEANS

Version: 1

Replacing: Mung Beans V.13.0 specification, White Beans V.1 specification, Black Beans V.1 specification, US Pinto Beans Grade 2 V.13.0 specification

Date of issue: 02/09/2022

*Reason for issue:*

*This document merges different specifications of specific beans, representing a generic new reference for all types of beans purchased by WFP except for soybean.*

#### 1. Introduction

This generic specification applies to all types of **Beans** purchased by WFP **except for Soybean** (hereafter called the product). The actual type and color of beans are as per contract.

#### Definitions

**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.

**Seeds with slight defects:** seeds which have not reached normal development; seeds with extensive seedcoat staining, without the cotyledon being affected; seeds in which the seedcoat is wrinkled, with pronounced folding, or broken pulses.

**Broken seeds:** broken in whole pulses are pulses in which the cotyledons are separated or one cotyledon has been broken. Broken in split pulses are pulses in which the cotyledon has been broken.

**Foreign matter:** includes inorganic and organic matter other than beans or part of beans. This includes dust, twigs, seedcoats, seeds of other species, dead insects, fragments, or remains of insects, other impurities of animal origin.

**Inorganic foreign matter:** includes metallic pieces, shale, glass, dust, sand, gravel, stones, dirt, pebbles, lumps or earth, clay, mud.

**Organic foreign matter:** includes twigs, straws, seedcoats, seeds of other species, dead insects, fragments, or remains of insects, other impurities of animal origin.

**Discoloured:** includes beans which are distinctly blemished and/or off colour from the characteristic colour of the predominating class.

#### 2. Standards

Except when specified otherwise in the contract, 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/>;

Guidelines of International Commission on Microbiological Specifications for Foods:

<https://www.icmsf.org/publications/books/>;

Maximum Residue Limits of pesticide and veterinary drug:

<https://www.fao.org/fao-who-codexalimentarius/codex-texts/maximum-residue-limits/tr/>.

- CODEX GENERAL STANDARD FOR CONTAMINANTS AND TOXINS IN FOOD AND FEED (CXS 193-1995)
- CODEX GENERAL PRINCIPLES OF FOOD HYGIENE (CXC 1-1969)
- RECOMMENDED METHODS OF SAMPLING FOR THE DETERMINATION OF PESTICIDE RESIDUES FOR COMPLIANCE WITH MRLS (CXG 33-1999)
- CODEX GENERAL STANDARD FOR FOOD ADDITIVES (CXS 192-1995)
- CODE OF PRACTICE ON FOOD ALLERGEN MANAGEMENT FOR FOOD BUSINESS OPERATORS (CXC 80-2020)
- CODEX GENERAL GUIDELINES ON CLAIMS (CXG 1-1979)
- CODEX GENERAL STANDARD FOR THE LABELLING OF PREPACKAGED FOODS (CXS 1-1985)
- CODEX GUIDELINE ON NUTRITION LABELLING (CXG2-1985)
- CODEX STANDARD FOR CERTAIN PULSES GRAINS (CXS 171-1989)

### **3. Food safety and quality management at manufacturing premises**

The manufacturer shall be able to demonstrate by principle and practice the adoption, implementation and recording of:

- Good Manufacturing Practices (GMPs)
- Good Hygiene Practices (GHPs)
- Hazard Analysis Critical Control Point program (HACCP)
- Global Food Safety Initiative (GFSI) scheme principles

In this context an appointed WFP staff/ Quantity &Quality Inspector / Surveyor/Auditor is entitled to visit the factory without prior notice during any period when WFP product is being manufactured to check that production is done as per WFP contract specifications.

The WFP staff/Inspector/Surveyor/Auditors may examine any aspect of Supplier's manufacturing premises and its documentation relating to any products or services provided to WFP, including but not limited to production facilities, procedures, records, certifications, or practices.

Food suppliers shall notify WFP immediately of lots (pre-delivery and post-delivery) that fail to meet contract requirements. Any testing on food safety parameters for foods (and/or the associated raw materials) delivered to WFP shall be pre-agreed with WFP.

### **4. Product Specifications**

#### **General requirements**

- The product's organoleptic characteristics shall be characteristics of the designated product.
- The product shall meet the testing requirements stated in this document.

#### **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 Codex standard is absent, JECFA and 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) and Codex Maximum Residue Limits for Pesticide Residues.

Links of references mentioned above:

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

## **Shelf life**

The shelf-life shall be as per contract.

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.

## **6. Packaging and Marking**

Food shall be packed in a suitable container complying with the following packaging and marking specifications:

Name: 4.5 to 90 kg PP woven bag specification with or without PE inner liner.

Specification can be found here: <https://docs.wfp.org/api/documents/WFP-0000140775/download>.

Templates for packaging artwork are available in the packaging specification. The additional labelling requirements (e.g., to meet specific national requirements or donor requirements) shall be as per contract.

## **7. Additional technical document requirements**

When required, suppliers shall submit a Certificate of Analysis (CoA) 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. When 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.

▪ Quantitative tests:

<b>N o</b>	<b>Tests</b>	<b>Unit</b>	<b>Minimu m</b>	<b>Maximu m</b>	<b>Referenc e methods (latest versions) or equivalent validated methods*</b>
1	Moisture	%	0	15	ISO 24557
2	Cooking tests (12-hour soaking)	Minutes	0	90	
3	Foreign matter	%	0	1	ISO 605
4	Inorganic foreign matter	%	0	0.2	ISO 605
5	Organic foreign matter	%	0	0.1	ISO 605
6	Live insects	%	0	0	ISO 605
7	Seeds with serious defects	%	0	1	ISO 605
8	Seeds with slight defects	%	0	7	ISO 605
9	Broken seeds	%	0	3	ISO 605
10	Seeds of a similar colour but a different commercial type (except in beans with white seeds <sup>1</sup> )	%	0	3	ISO 605
11	Discoloured seeds	%	0	3	ISO 605
12	Seeds of different colour (other than discoloured seeds)	%	0	6	ISO 605
13	Toxic seeds: Crotonia (Crotonia spp.)	Seeds/kg	0	1	ISO 605
14	Toxic seeds: Jimson weed (Datura spp.)	Seeds/kg	0	1	ISO 605
15	Toxic seeds: Castor bean (Ricinus communis L.)	Seeds/kg	0	1	ISO 605
16	Toxic seeds: Corn cockle (Agrostemma githago L.)	Seeds/kg	0	1	ISO 605
17	Toxic seeds: Mexican Poppy (Argemone mexicana)	Seeds/kg	0	7	ISO 605
18	Toxic seeds: Cocklebur (Xanthium species)	Seeds/kg	0	7	ISO 605
19	Toxic seeds: Field bindweed (Convolvulus spp.)	Seeds/kg	0	7	ISO 605
20	Toxic seeds: Darnel Ryegrass (Lolium temulentum)	Seeds/kg	0	7	ISO 605

<sup>1</sup> For beans with white seeds, this parameter shall be reported as 0%. All color related matters shall be reported under other relevant parameters.

21	Toxic seeds: Morning glory (Ipomoea purpurea)	Seeds/kg	0	7	ISO 605
22	Total aflatoxins (B1+B2+G1+G2)	ppb	0	4	ISO 16050
23	Aflatoxin B1	ppb	0	2	ISO 16050
24	Cadmium (Cd)	mg/kg	0	0.1	AOAC 999.10
25	Lead (Pb)	mg/kg	0	0.1	AOAC 986.15

\*Meets the requirements of EN ISO 16140-2

▪ Qualitative tests:

No	Tests	Requirements	Reference methods (latest versions) or equivalent validated methods*
1	Organoleptic	Bright and clear appearance, Normal smell and colour	Organoleptic examination
2	Type of beans	As per contract requirement	
3	GMO (only if required in the contract)	Negative (when contract does not specify a limit then negative means < 0.9% of GMO material) and as per contract	ISO 21569
4	Radiation (Only for foods originated from Ukraine & Russia or as per contract)	10 Bq/kg Max (Cs137&134)	WEAC.RN.METHOD3.0 (Cs and other)

\*Meets the requirements of EN ISO 16140-2