



## Technical Specifications for WHEAT FLOUR – UKRAINE

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*Key update:*

*Updated packaging requirements considering also UACO procurement requests.*

### 1. INTRODUCTION

This specification applies to **local procurement of Wheat Flour** (hereafter called the product) prepared from common wheat, *triticum aestivum* L., or club wheat, *triticum compactum* Host., or mixture of thereof for human consumption.

### 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 Standard for Wheat Flour: Codex Stand 152-1985, amendment: 2016, 2019.
- Ukrainian Standard on wheat flour ISTU 46.004-99.

### 3. RAW MATERIALS

#### 3.1 Wheat

The product prepared from wheat of good quality, free from foreign materials, substances hazardous to health, excessive moisture, insect damage and fungal contamination and shall comply with all relevant national food laws and standards. Specific requirements for the wheat grains are:

- Conform to Codex STAN 199-1995
- Be obtained from non-genetically modified varieties (*if required by the contract*).

Wheat grains must be stored under dry, ventilated and hygienic conditions. Only authorized insecticides (e.g. phosphine) may be used for fumigation control. Where needed, fumigation must be performed by certified operators.

Wheat grains 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. PRODUCT SPECIFICATIONS**

##### **4.1 General requirements**

###### **4.1.1 Wheat flour characteristics**

Following shall be met in Wheat Flour:

- Shall be milled from fully mature, sound wheat grains, free from filth and impurities
- Shall be free from insects, its parts or its wiggler, parasites and rodents' excreta
- Shall be clean free from any foreign materials and substances hazardous to health
- Shall retain its natural properties and free from rancidity and unacceptable odour or taste
- Shall be homogeneous in colour and free from agglomeration
- Shall be suitable for bread making

###### **4.1.2 Contaminants**

###### **Heavy metals**

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

###### **Pesticide residues**

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

###### **Mycotoxins**

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

###### **Other contaminants**

The product shall be free from other contaminants in amounts which may represent a hazard to health.

###### **4.1.3 Hygiene**

It is recommended that the product covered by the provisions of this standard 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.

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

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

- 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.

In case fumigation is required:

- It shall be done as specified in the GAFTA Standard for Fumigation<sup>1</sup>.
- Only phosphine gas can be employed during fumigation

#### **4.1.4 Food Additives**

Any food additive (if used) shall comply with Codex Standard on Food additives Codex stan 192-1995 and Codex Stand 152-1985 and applicable National Standards.

#### **4.1.5 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<sup>2</sup>

### **4.2 Specific requirements**

#### **4.2.1 Shelf life**

The product covered by the provision of this specification shall retain above qualities for at least one year from date of manufacture when stored dry at ambient temperatures prevalent in the country of destination.

Products shall remain stable & suitable for human consumption throughout the shelf-life. Suppliers should conduct shelf-life studies following WFP shelf-life study requirements (available at <https://docs.wfp.org/api/documents/WFP-0000118387/download/>) to support the shelf-life claim.

## **5. PACKAGING**

### **5.1 General requirements**

a) Bags >5kg

Food shall be packed in a suitable container complying with the packaging and marking requirements separately available under "[4.5 to 90 kg PP woven bag specification with or without PE inner liner](#)" on <http://foodqualityandsafety.wfp.org/specifications>. The applicable packaging is a PP woven bag without PE inner liner.

b) Bags <5kg

The product shall be packed in appropriate packaging, which safeguard the hygienic, nutritional, technological, and organoleptic qualities of the product. The packaging materials used shall be made of substances, which are safe and suitable for their intended use. They should not impart any toxic substance or undesirable odour or flavour to the product. All packaging materials in direct or indirect contact with the food must be food grade and compliant with the regulation of the country where the product is packed. (if not existing: compliance with EU or FDA legislations required). Bags must be new, uniform, strong, fit for export and multiple handling.

The product can be packed in paper bag with a minimum grammage of 90 g/m<sup>2</sup>.

Bags must pass drop test. Please refer to "[4.5 to 90 kg PP woven bag specification with or without PE inner liner](#)" for the test conditions.

Note: Packaging requirement can also be agreed as per contractual requirements.

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<sup>1</sup>[https://www.gafta.com/write/MediaUploads/Trade%20Assurance/Gafta\\_Standard\\_for\\_Fumigation\\_WEB.PDF](https://www.gafta.com/write/MediaUploads/Trade%20Assurance/Gafta_Standard_for_Fumigation_WEB.PDF)

<sup>2</sup> [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)

Product net weight as per contract requirement,

- Average net weight of the batch should not be less than specified net weight,
- Weight and quantity tolerance must meet The International Organization of Legal Metrology International Recommendation OIML R 87<sup>3</sup>.

WFP shall be informed and consulted before making any modification to the current primary, secondary and tertiary packaging (e.g., the composition of the packaging material(s), ink or any other parameters) that could impact the integrity of the packaging and food or storage and transport conditions.

## 6. MARKING

The labelling of the product covered by the provision of this specification shall comply with CODEX STAN 1-1985. Marking in this specification supersedes marking paragraph of the "[4.5 to 90 kg PP woven bag specification with or without PE inner liner](#)" specification.

The following information should be available on bags:

- Name of Product: Wheat Flour
- Net content
- Name and address of the supplier (including country of origin)
- Batch number (or SI)
- Production date
- Best Before End: mm/yyyy
- Nutrient table
- Ingredient list
- Not for sale
- WFP logo

Each bag must have at least the date of production in format dd/mm/yyyy and/or other lot identifier that can be used for traceability up to one day of production printed.

Suppliers have 2 options:

- Apply the tag with stamped date of production and/or batch number
- Apply the date of production and/or the batch number with the ink jet directly on the bag.

Additional marking is as per contractual agreement and conforms with Legislations of the Country in which the product is distributed.

Templates for artwork available on: <https://foodqualityandsafety.wfp.org/specifications>

## 7. STORING

The product covered by the provision this specification must be stored under dry, ventilated and hygienic conditions.

## 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.

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<sup>3</sup> OIML R 87 Quantity of commodity in prepackages [https://www.oiml.org/en/files/pdf\\_r/r087-e04.pdf](https://www.oiml.org/en/files/pdf_r/r087-e04.pdf) (latest edition)

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.

*Table 1: Analytical Requirements and testing methods*

Quantitative tests:

No	Tests	Unit	Minimum	Maximum	Reference methods (latest versions) or equivalent validated methods*
1	Moisture content (w/w)	%	0	14.0	ISO 712/ICC no. 110 /1
2	Total ash (on dry matter)	%	0	0.65	AOAC 923.03 ISO 2171 / ICC method 104/1
3	Protein (on dry matter)	%	11	100	ISO 20483 / ICC 105/1 O
4	Hagberg Falling Number (HFN)	Seconds	160	n/a	ICC 107 / ISO 3093
5	Wet gluten	%	24	100	AACC 38-12A / ICC No 155 ISO 21415-1

\*Meets the requirements of EN ISO 16140-2

Qualitative tests:

No	Tests	Requirements	Reference methods (latest versions) or equivalent validated methods*
1	Organoleptic	Pleasant smell, typical taste and color	Sensory evaluation
2	Baking test	Bread made from the flour shall have good characteristics	Bread baking

\*Meets the requirements of EN ISO 16140-2