

Technical Specifications for:

INSTANT OAT FLAKES - UKRAINE

Version: 1 Replacing: n/a

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Key update:

this specification represents the first version developed for Instant oat flakes local procurement in Ukraine.

1. Introduction

This specification applies to **Instant Oat flakes** purchased locally by WFP in Ukraine.

The product is obtained through a suitable technological process: rolling oat grains (*Avena sativa*) after grading, peeling and heat treating for enzymatic inactivation.

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/;

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)
- UKRAINIAN STANDARD TU U 10.6-00954544-008:2016
- EC REGULATION 1881/2006

3. Raw Materials

Product must be made from uncrushed oat grain best-quality, which has been steamed and rolled (flattened grains).

Ingredient shall be of good quality, comply with the latest version of Codex Alimentarius and applicable food laws and regulation in the food originating countries (whichever is stricter). Where there is no standard available, JECFA and EFSA evaluations shall be considered for guidance limits.

Suppliers shall conduct risk assessment on raw material to ensure quality is adequate to meet final product specifications.

Only raw materials specified below are allowed in this product.

Raw material name	Applicable Food Standards
Oat Grains	CXS 201-1995 Standard for Oats

4. Processing

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.

5. 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.
- Readiness of product for consumption after soaking: 5 minutes.

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), Codex Maximum Residue Limits for Pesticide Residues and Guidelines of International Commission on Microbiological Specifications for Foods**.

The product shall also comply with the following requirements:

Heavy Metals

No	Test	Limit
1	Lead	Max. 0.2 mg/kg
2	Cadmium	Max. 0.1 mg/kg
3	Copper	Max. 10.0 mg/kg
4	Zinc	Max. 50.0 mg/kg
5	Mercury	Max. 0.03 mg/kg
6	Arsenic	Max. 0.2 mg/kg

Mycotoxins

No	Test	Limit
1	Aflatoxin B1	Max. 0.002 mg/kg
2	Zearalenone	Max. 0.075 mg/kg
3	Ochratoxin A	Max. 0.003 mg/kg
4	T2 Toxin	Max. 0.1 mg/kg
5	Deoxynivalenol	Max. 0.75 mg/kg

Radionuclides

No Test		Limit
1	Strontium-90	Max. 20 Bq/kg
2	Cesium-137	Max. 50 Bq/kg

Links of references mentioned above:

Shelf life

The product shall have minimum 12 months shelf-life when stored dry under tropical conditions (>40 °C). Or reduced shelf life as per contract. 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.

Products shall have a minimum of 80% of shelf-life remaining when presented to WFP for inspection, unless otherwise authorized by WFP.

^{*}http://www.ifia-federation.org/content/wp-content/uploads/Fit_for_Human_Consumption_Bulletin_Rev_4.pdf

^{**}https://www.icmsf.org/publications/books/

6. Packaging and Marking

WFP shall be informed and consulted before making any modifications 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.

Net weight

The weight of product is 500 grams.

Weight and quantity tolerance shall meet The International Organization of Legal Metrology International Recommendation OIML R 87¹.

Primary packaging

Sachets shall be:

- Food grade materials compliant with the last amendments of national regulations in the country of production (if not existing: compliance with EU or FDA legislation required) applicable for all components of the primary packaging (material and inks).
- Optimized in terms of shape and dimensions to avoid space loss in the cartons.
- Properly sealed (test example: ASTM F2338 09, ASTM D3078 02 or equivalent).
- The sachets must be placed in an appropriate way in the carton box during the packing process to avoid packaging & product damage.

Secondary packaging

The product shall be packed in cartons suitable for the humanitarian supply chain and must contain 100 individual packages, unless otherwise specified in the contract.

It is under supplier responsibility to select a packaging material that will resist to multiple handling and up to 2 meters stacking.

Cartons shall be:

- New, manufactured from well-constructed double wall corrugated board
- With an edge crush resistance of 60 ECT = 60 lbs/in eq 11 kN/m (ISO 3037) and a specific weight of 700 to 1000 grams per square meter
- Fully filled for maximum strength and dimensions adjusted to the load
- The fluting must be vertical, supporting the load
- The carton should be plain brown with virgin fibres
- No stapling will be accepted
- Firmly closed (top and bottom)

Tertiary packaging

If pallets are used inside containers: it is highly recommended to have 3 first bottom layers placed as column stacking, the rest can be interlocked (cross-stacking) for load stability. Pallet must be wrapped in a suitable manner (locked to the pallet, enough containment force) and the cartons should be banded when necessary. The cartons must be secured to pallets in order to prevent any damage to the contents or packaging during shipment. Pallet used should be strong enough to support the charge during transportation. Pallets shall be stackable (minimum double stock) without damage to the cartons during

 $^{^{1}} OIML~R~87~Quantity~of~commodity~in~prepackages~www.oiml.org/en/files/pdf_r/r087-e16.pdf,~latest~edition~to~be~followed.$

shipment. The pallets are recommended to be heat treated as per ISPM 15 standards (methyl bromide fumigation is not allowed).

If no pallets are used inside container: dunnage (of strong sheets such as carton, plywood...) should be placed inside each container at every three layers of cartons to provide the required stacking strength. In addition, protecting material like air bag, carton, polystyrene, can be used. Also, kraft paper must be adhered to all internal sides, door, and floor of container. Kraft paper also need to be placed on the top of packaging.

For shipping containers, unless fully shrink-wrapped pallets are used, and unless otherwise specified in the contract, it is highly recommended to place desiccant in container at appropriate location in order to absorb moisture. Supplier needs to use high quality desiccant and calculate the quantity of desiccant based on:

- Efficiency of desiccant
- Length of time in transit in container
- Container capacity

Supplier needs to provide in the offer the type of desiccant and quantity to be used for the consignment.

Table 2: Guideline on the quantity to be used for calcium chloride-based desiccants:

Estimated days in container	20 ft container	40 ft container
15-59 days	9.00 kg	17.50 kg
60-89 days	11.25 kg	22.50 kg
90-120 days	13.50 kg	25.00 kg

Better alternative material can be used upon agreement with WFP.

Empty containers/vehicles shall be clean, pest free and free of damage, odours and previous cargo remains.

Marking

The labelling of the product shall comply with the standards listed in the relevant food specifications. The layout of labels, for both package and carton, shall be approved by WFP. The labelling of the product covered by the provision of this specification shall comply with CODEX STAN 1-1985. Labels of package and carton must be approved by WFP.

Unless otherwise specified in the contract, information in table 3 must be printed on the packaging of the product.

Table 3: Generic marking requirements

	Individual package	Carton	
Product name	Instant oat flakes		
Net weight	500g (or as per contract)	as per contractual requirements	
Nutrients content	XX ²	-	
Ingredient list	XX; (including allergens ³)	-	
Storage instruction	"Store under dry, ventilated and hygienic conditions and away from direct sunlight"		
Manufacturer name	Produced by: XX		

² All XX must be filled by manufacturer.

³ Allergen labelling guidelines: all ingredients considered allergens as per EU Regulation 1169/2011 – Annex II -shall be labelled in bold letters in the ingredient list. The supplier is responsible for creating and maintaining an updated list of allergens present in the manufacturing facility. All products manufactured in that facility must be labelled with the entire list of allergens identified in that facility, either as ingredients or as cross-contamination.

For cross contamination labelling, the following terms should be used: "May contain traces of" The addition of new allergens to a facility needs to be evaluated and communicate beforehand, as an update of packaging artwork will be necessary.

Manufacturer address	XXX, including country of origin
Manufacturer batch/lot number	XX
Production date (dd/mm/yyyy)	XX
Best Before End (mm/yyyy)	XX
Donor and WFP logo	as per contractual requirement
Additional marking	as per contractual requirement

Note: Nutrient content that will be printed on the package shall be based on analytical reports from accredited laboratory.

The additional labelling requirements shall be as per contract. When such requirements conflict with this specification, the contract requirements prevails.

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.

Analytical Requirements and testing methods:

Quantitative tests

No	Tests	Unit	Minimum	Maximum	Reference methods (latest versions) or equivalent validated methods*
1	Moisture (w/w)	%	0	12.0	ISO 712
2	Total ash	%	0	2.1	ISO 2171

3	Foreign matter	%	0	0.3		
4	Mineral foreign matter	%	0	0.03		
5	Organic foreign matter	%	0	0.1	Visual	
6	Metal foreign matter	ppm	0	3.0	examination	
7	Live and dead insects		0	0		
8	Total Plate Count	cfu/g	0	5x10 ⁴	ISO 4833	
9	Total Coliforms	presence	0	0	ISO 4832	
		in 0.1g				
10	Salmonella spp	presence	0	0	ISO 6579	
		in 25g				
11	Yeast and Molds	cfu/g	0	10 ³	ISO 21527	
12	Escherichia coli spp	presence	0	0	ISO 16649	
		in 0.1g				

^{*} Meets the requirements of EN ISO 16140-2

Qualitative tests

No	Tests	Unit	Requirements	Reference methods (latest versions) or equivalent validated methods*
1	Organoleptic	Smell taste and colour	Smell: characteristic of oat flakes, without foreign smells Taste: characteristic of oat flakes Colour: white with shades of cream to yellowish	Organoleptic evaluation

^{*}Meets the requirements of EN ISO 16140-2