

Fortified WHOLE MILK POWDER FOR ADULT CONSUMPTION

1. SPECIFICATIONS:

The Whole Milk is to be in accordance with the following specifications:

General Description of the fortified WHOLE MILK POWDER : shall be homogeneous in colour and free from agglomeration, impurities or coloured particles. Typical taste and smell, shall retain its natural properties and free from rancidity and unacceptable odour or taste. All ingredients shall be of good quality, comply with the latest version of Codex Alimentarius and applicable food laws and regulation in the food originating countries. The product shall meet the testing requirements stated in this document.

Parameter	Requirements	Reference methods (or equivalent)
Manufacture	Obtained by the spray method	Obtained by the spray
Appearance	Uniform, white or slightly yellow, no coloured particles or impurities.	visual
Flavour and taste	Slight creamy taste, free from other objectionable taste and flavour cream.	sensory
Colour	Creamy	visual
Milk Fat	26% min. less than 42% m/m	ISO 1736:2008
Milk protein in milk solids-not-fat*	34% min. m/m	ISO 8968-1:2014
Fat from Non-Milk Sources	None	ISO 12078:2006(E) IDF
Moisture content	3% max.	ISO 5537:2004
Titrateable acidity	0.15% max. (expressed as lactic acid)	ISO 6091:2010
Lactates (in non-fat dry matter)	150 mg/100g max.	ISO 8069:2005
Ash	7.3% max.	AOAC 945.46
Lactose content W/W	35-39%	HPLC
Burnt particles	15 mg max. (i.e., at least disk B)	ISO 5739:2003
Phosphatase test	Negative	ISO 11816-1:2013
Neutralizers	None	HPLC
Additives	None	
Insolubility index	0.5 ml max. (at 24 C°)	ISO 8156:2005
Copper	1.5 ppm max.	METS-IP-103
Impurities	Nil	Visual

Iron	10 ppm max.	METS-IP-103
Total bacterial count	50,000 per gm max.	ISO 4833-1:2013
Total coliforms in 0.1 gm	Negative in 0.1 gm (Absence of pathogenic or toxic bacteria)	ISO 21528-1
Salmonella	n=5, c=0, m=absent in 125g	ISO 6579-1
Staphylococcus aureus	n=5, c=2, m=10 cfu/g, M=100 cfu/g	ISO 6888-1
Melamine	1.0 mg/kg Max.	
Rancidity (Kreis Test)	Negative	Kres method
Antibiotics and pesticides	Negative	LCMSMS
Vitamin A	10000 IU (250mcg) /100gm max.	AOAC 974.29 OR AOAC 992.04 OR EN 12823-1
Vitamin D	1000 IU (25mcg)/100gm max.	AOAC 992.26 OR AOAC 992.02 OR EN 12821

*The water content does not include water of crystallization of the lactose; the milk solidsnot-fat content includes water of crystallization of the lactose

The Extra Grade Whole Milk powder, instant, fortified with Vitamin A and D shall be safe and fit for human consumption.

* N.B.: The food commodity must not be derived from biotechnology. Suppliers must ensure that food commodities are brought in from countries whose health status allows this.

2. TECHNICAL DOCUMENT REQUIREMENTS:

When required, suppliers shall submit a Certificate of Analysis of the final product to UNRWA, along with other documents

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 UNRWA staff/Quantity & Quality Inspector/Surveyor/Auditor is entitled to visit the factory without prior notice during any period when UNRWA product is being manufactured to check that production is done as per UNRWA contract specifications.
- The UNRWA staff/Inspector/Surveyor/Auditors may examine any aspect of Supplier's manufacturing premises and its documentation relating to any products or services provided to UNRWA, including but not limited to production facilities, procedures, records, certifications, or practices.
- Food suppliers shall notify UNRWA 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 UNRWA shall be pre-agreed with UNRWA.
- 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 UNRWA internationally.

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 (CX5193-1995), Codex Maximum Residue Limits (MRLs) and Codex Extraneous Maximum Residue Limits (EMRLs) for Pesticides, Codex Maximum Residue Limits (MRLs) for Residues of Veterinary Drugs in foods (CX/MRL 2-2021) and Guidelines of International Commission on Microbiological Specifications for Foods.
- Supply food stuff from producers or companies registered in white list of NFSA (NATIONAL FOOD SAFETY AUTHORITY).

5. PACKING:

The whole milk shall be packed in new strong cartons (3 Plys) closed with adhesive tape at the top.

and at the bottom. Each carton contains its full capacity of new Aluminum foil sachets.

The sachets must be closed, heat-sealed at both ends, of 0.5 kg / 0.8 kg. Net each bag. Inside the cartons, cartons cross pieces shall be placed to protect the sachets.

Unit of packing for **Gaza** field: **0.800 kg bags**

Unit of packing for **Syria** field: **0.400 kg bags**

6. SHELF LIFE

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

Shelf-Life duration: 24 months

7. MARKING: SEE ATTACHED SPECIAL CONDITIONS OF CONTRACT.

All the above specifications will be strictly adhered at Field level.