Technical Specifications for
WHOLE MILK POWDER

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1. SCOPE
This standard prescribes the requirements for vitamin Whole Milk powder purchased and distributed by WFP.

2. STANDARDS AND RECOMMENDATIONS
Whole Milk powder shall comply, except when specified otherwise in the contract, with the following guidelines or standards of Codex Alimentarius:

- CAC/MRL 02-2006, Maximum residue limits for veterinary drugs in foods
- CAC/RCP 57, Code of hygiene practice for milk and milk products
- CODEX STAN 1: General standard for the labelling of pre-packaged foods
- CODEX STAN 192-1995, Codex general standard for food additives
- CODEX STAN 193, Codex general standard for contaminants and toxins in foods
- CODEX STAN 207-1999, Codex standard for milk powder and cream powder

3. DEFINITIONS
Milk
Milk is the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it, intended for consumption as liquid milk or for further processing.

Milk powder
Milk powder is milk product which can be obtained by the partial removal of water from milk.

4. PROCESSING
4.1 Method of processing
Whole milk powder is obtained by the spray method.
4.2 Food safety and risk assessment at manufacturing premises

For compliance with Codex standards the processor must be able to demonstrate by principle and practice the adoption, implementation and recording of:

- Good Manufacturing Practice
- Hazard Analysis Critical Control Point program

In this context an appointed WFP Inspector / Quality Surveyor is entitled to visit the factory without prior notice during any period when WFP product is being manufactured to check that the GMP and HACCP systems are in place. The Inspector / Quality Surveyor may request to see:

- **Records** (i.e. names of people in charge of the process and quality control, temperatures of the process, mixing times / quantity, cleaning schedules, etc).
- **Procedures** (e.g. cleaning, personnel hygiene, HACCP, sampling and analysis).
- **Instructions** (e.g. process instructions, cleaning instructions).
- The **quality manual** for the process or factory.

The processor must be registered under national food law as a processor of foods for human consumption.

5. PRODUCT SPECIFICATIONS

5.1 Minimum requirements:

- Fat: minimum 26 %
- Moisture: maximum 3 %
- Titratable acidity (of non-fat dry matter) ADPI:
  - + in ml of decinormal sodium hydroxide solution: maximum 3
  - + in lactic acid: maximum 0,15 %
- Lactates (in non-fat dry matter): maximum 150 mg/100 g
- Additives: none
- Phosphatase test: negative, i.e. maximum 4 ìg of phenol/g of reconstituted milk
- Insolubility index: maximum 0,5 ml (at 24 °C)
- Burnt particles: maximum 15 mg, i.e. at least disc B
- Micro-organisms: maximum 50 000/g.
- Coliform test: negative in 0.1 g, in accordance with Regulation (EC) No 1080/96 (OJ L 142, 15.6.1996, p. 13),
- Buttermilk test: negative
- Whey test: negative
- Taste and smell: clean
- Appearance: white or slightly yellow, no impurities or coloured particles
- Antimicrobial substances: negative

5.2 Contaminants

**Whole Milk powder** shall be free from objectionable matter; not contain any substances originating from micro-organisms or any other poisonous or deleterious substances such as anti-nutritional factors, heavy metals or pesticide residues, in amounts which may represent a hazard to health.
5.3 Fit for human consumption guarantee
Suppliers shall have to check the quality of their products and guarantee that they are ‘fit for human consumption’.

6. PACKAGING
As per contractual agreement

7. LABELLING
As per contractual agreement

8. STORING
Enriched Dry Skimmed-Milk powder must be stored under dry, ventilated and hygienic conditions.