Quality control

Lipid Nutrient Supplement Paste Small Quantity (LNS-SQ)

Production process and Quality Management

1. Quality management

Products must be manufactured in accordance with Codex Alimentarius applicable references, in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene recommended by the Codex Alimentarius Commission (CAC/RCP 1-1969), and other relevant Codes of Hygienic Practice and Codes of Practice. All producers must have Good Manufacturing Practice (GMPs) and Good Hygiene Practices (GHPs), a food safety policy in place and a complete quality management system based on a Hazard Analysis and Critical Control Points (HACCP) approach to food safety. The quality assurance system must include an Environmental Monitoring Plan to ensure no contamination from the environment and cross-contamination can happen. Zoning shall be clearly identified and control plan verified and validated

Applicable standards :

- ISO 22 000-2005: Food Safety Management Systems – Requirements for any organization in the food chain
- CAC/RCP 66-2008: Code of Hygienic Practice for Powdered Formulae for infants and young children

2. Traceability

The manufacturer should have implemented an upstream and downstream quality system allowing for every production batch to trace the composition, the raw materials used, the results of the analysis performed on raw materials, intermediate products and final product, customers, etc. One production batch shall not exceed 200 MT and one week of production.

3. Additional testing

As per contractual agreement, ICRC/IFRC may appoint an inspection company that will check that the food matches requirements. Additional tests may be defined in case further quality assessment is required. This will be performed in addition to analysis performed by the supplier according to his quality internal control system.

4. Sampling Plan

Sampling frequency (lot size) will be defined based on the daily production of the producer.

- For producers with daily production equal or greater than 100MT, the inspection lot size will be one day production
- For producers with daily production less than 100MT, the inspection batch size will be one week production.

The following number of sample representative of the inspection lot will be sent to the laboratory (which should be ISO 17025 with a scope of work related to food analysis).

- One (1) set of samples for analysis 1-6 in table 4 and for retention analysis
- Thirty (30) samples for Salmonella analysis
- Ten (10) samples for Enterobacteriaceae analysis

5. Table of compulsory analysis

Analytical requirements		
Ingredients	**Applicable Standards**	**Specifications**
Protein	AOAC 991.20	- 11.8g-14.5g/100g of product
Lipid	ISO 17189	- 30.9g-37.8g/100g of product
Vitamin A	EN 12823-1 2014	- 2.0mg -3.0mg/100g of product
Vitamin C	EN 14130:2003 AOAC 2012.21 AOAC 985.33	- 150-375mg /100g of product
Iron (Fe)	AOAC 990.05 ISO 8294	- 40-50 mg for 100g of product
Microbioly		
Salmonella	ISO 6579 25g analytical unit, samples may be pooled dry. The total analytical unit should be 750g *Lab sample shall be prepared by pooling with a pool of max 375g*	- number of sampling units: 30 - define the plan (2 or 3 class plan): 2 - maximum allowable number of defective sample: 0 - microbiological limit, separates good quality from defective quality: absent in 25g
Enterobacteriaceae	ISO 21528-2 10g analytical unit, no pooling *No composite sample*	- number of sampling units: 10 - define the plan (2 or 3 class plan): 3 - maximum allowable number of defective sample units in a 2-class plan or marginally acceptable sample units in a 3-class plan: 2 - microbiological limit, separates good quality from marginally acceptable quality: ≤10cfu/g - microbiological limit, separates from marginally acceptable quality to defective quality: ≤100 cfu/g
Aflatoxin	ISO 16050	Total Aflatoxins < 5ppb