

# Dairy Based Nutritional Powder P3

## PRODUCT SPECIFICATION

### IFB301 Dairy Based Nutritional Powder P3

#### General description

Nutritional based powder P3 is a Nutritional basepowder, suitable as an ingredient for nutritional formulations for toddlers 12-36 months old. It is a combination of skim milk with whey, minerals, vitamins, trace elements and vegetable oils. This Nutritional basepowder is intended for the China, Australia and New Zealand markets. With specific drymix additions it can also be used to formulate products for Codex markets; information on the required additions available on request. Raw materials used in this product do not contain sucrose, GMO materials, gluten or partially hydrogenated oils and have not been treated by ionizing radiation



#### Physical characteristics

Homogeneous creamy or yellow colour free flowing powder with excellent solubility in warm water. It has a clean, bland flavour and odour, and slightly sweet taste.

#### International Standards Compliance

This Dairy Based Nutritional Powder meets the requirements of:

- China GB standards; GB 10767-2010
- Food Standards Australia and New Zealand (FSANZ)
- Halal / Kosher
- CODEX CAC 66/2008

#### Packaging Information

Packed in tamper evident, strippable barrier bags (multi walled kraft paper bag with barrier polyethylene/nylon/EVOH liner). Outer bags are glued closed for tamper evidence. Inner bags are heat sealed. No staples or metal fasteners are used. Bags are palletised on slipsheets 2200x1160mm, protected by a topsheet and full shrink wrapping. Available on 2200x1160mm pallets on request. Bags are gas flushed with nitrogen (N2) and carbon dioxide (CO2), printed with lot code, manufacturing and expiry dates. No staples or metal fasters are used.

#### Storage and Shelf Life

Shelf life is 18 months from the date of manufacture when stored in sealed original packaging. Recommended storage is below 25°C and 65%RH, out of direct sunlight and away from strong smelling ingredients.

**Detailed requirements:** The following section lists the detailed compositional specifications for this product. Other analytical methods may be used to those specified as long as the results are equivalent.

#### Physical Properties

| Parameter          | Units* | Max.      |
|--------------------|--------|-----------|
| Bulk density       | kg/l   | 0.48-0.55 |
| Insolubility index | ml     | <0.2      |
| Free Fat           | %      | <1.5      |
| Scorched Particles | /65g   | Grade A   |
| Foreign Matter     | /65g   | Absent    |
| Impurity           | mg/kg  | <12       |
| Residual oxygen    | %      | <3        |

#### Microbiological Specification

| Parameter                  | Units*   | Max    |
|----------------------------|----------|--------|
| Aerobic Plate Count (35°C) | cfu/g    | 500    |
| Coliforms                  | cfu/g    | -      |
| Yeasts and Moulds          | cfu/g    | <10    |
| Salmonella                 | 60 x 25g | Absent |
| Listeria monocytogenes     | 10 x 25g | Absent |

|                                  |          |        |
|----------------------------------|----------|--------|
| Coagulase Positive Staphylococci | cfu/g    | -      |
| E.coli                           | cfu/g    | -      |
| B.cereus                         | cfu/g    | <100   |
| Enterobacteriaceae               | /10g     | -      |
| C.sakizakii                      | 30 x 10g | Absent |
| Clostridium perfringens          | cfu/g    | -      |

#### General Composition

| Parameter                     | Units*  | Target |
|-------------------------------|---------|--------|
| <b>Proximates:</b>            |         |        |
| Energy                        | KJ/100g | 2038   |
| Protein (N*6.25)              | g/100g  | 22.3   |
| -Whey                         | g/100g  | 8.9    |
| -Kasein                       | g/100g  | 13.4   |
| Fat                           | g/100g  | 23.0   |
| -Linoleic acid (LA)           | mg/100g | 4078   |
| -α-Linolenic acid (ALA)       | mg/100g | 453    |
| -ratio LA/ALA                 | -       | 9      |
| Carbohydrates – (% total CHO) | g/100g  | 47.5   |
| Moisture                      | %m/m    | 2.5    |
| Ash                           | %m/m    | 4.7    |
| <b>Minerals:</b>              |         |        |
| Calcium                       | mg/100g | 720    |
| Chloride                      | mg/100g | 720    |
| Copper                        | μg/100g | 396    |
| Iodine                        | μg/100g | 177    |
| Iron                          | mg/100g | 7.3    |
| Magnesium                     | mg/100g | 71     |
| Manganese                     | μg/100g | 330    |
| Phosphorus                    | mg/100g | 450    |
| Potassium                     | mg/100g | 959    |

| Parameter            | Units*      | Target |
|----------------------|-------------|--------|
| Selenium             | μg/100g     | 25.0   |
| Sodium               | mg/100g     | 222    |
| Zinc                 | mg/100g     | 4.2    |
| Ca:P                 | mg/100g     | 1.6    |
| <b>Vitamins:</b>     |             |        |
| Vitamin A            | μgRE/100g   | 625    |
| Vitamin D            | μg/100g     | 8.7    |
| Vitamin E            | mgα-TE/100g | 12.8   |
| Vitamin K            | μg/100g     | 67     |
| Vitamin B1           | μg/100g     | 823    |
| Vitamin B2           | μg/100g     | 1605   |
| Vitamin B6           | μg/100g     | 495    |
| Vitamin B12          | μg/100g     | 3.7    |
| Niacin               | μg/100g     | 5689   |
| Folic acid           | μg/100g     | 109    |
| Pantothenic Acid     | μg/100g     | 5196   |
| Vitamin C            | mg/100g     | 150    |
| Biotin               | μg/100g     | 34     |
| <b>Nutritionals:</b> |             |        |
| L-Carnitine          | mg/100g     | 16     |
| Taurine              | mg/100g     | 34.3   |
| Choline              | mg/100g     | 130    |
| Inositol             | mg/100g     | 107    |

\*Unless otherwise stated, all percentages used in this document are mass/mass.