



FrieslandCampina 

Ingredients

Essential[®] 

Essential[®] Start IF 110

Essential[®] Start IF 110 is a semi-finished product intended for the production of infant formulas, follow-on formulas and young child formulas. For more than 75 years, we've been focused to offer children a great start in life. That believe inspires us to create solutions trusted globally for nourishing the most vulnerable members of society. Early life nutrition demands purity and safety. The kind that comes from dedication, end-to-end knowledge of manufacturing processes and regulatory standards. As we own the entire product chain, we can source the freshest milk possible from our own farms where cows graze on lush Dutch meadows. Then process it with an unbeatable level of quality assurance, guaranteeing full infant grade quality as every child has the right to grow up healthy.



Product characteristics

Essential[®] Start IF 110 is a spray dried semi-finished product produced from our own high-quality fresh bovine milk and demineralized whey (Deminal[®] 90). The ratio between whey protein and casein is 1.3. A blend of vegetable oils delivers a balanced ratio of linoleic and alpha-linolenic acid (ratio 7.2). The palm oil is highly purified and derived from sustainable sources (certified by RSPO).

Essential[®] Start IF 110 is heat-stable and has excellent solubility properties. The powder is light creamy white, free flowing with a good dispersibility. The taste can be characterized as slightly milky.

Application

Essential[®] Start IF 110 is a semi-finished product that is used worldwide for the production of infant formulas, follow-on formulas and young child formulas. This semi-finished product is a perfect start for dry blending final infant milk formulas as it contains most of the essential nutrients. Essential[®] Start IF 110 is suitable for the production of infant milk formulas in accordance with the compositional requirements of the EU*, China and Codex. Please feel free to inquire about local compliance requirements.

* To be compliant with new EU legislation in 2020 please contact us.

Packaging

Essential[®] Start IF 110 is packed in a multi-layered paper bag with a polyethylene inner liner and a net content of 25kg. The paper bags are palletized and wrapped yielding units of 1,000kg. The product is also available in big bags (850kg).

Shelf life and storage conditions

Essential[®] Start IF 110 semi-finished product is best stored in original unopened packaging under clean, cool and dry conditions, away from direct sunlight and separated from strongly odorous materials. Essential[®] Start IF 110 has a shelf life of 6 months (25kg bags).

List of ingredients

Skimmed milk, demineralized whey, vegetable oils (palm oil, canola oil (low erucic acid type), palm kernel oil, sunflower oil), lactose, potassium citrate, calcium carbonate, magnesium chloride, sodium citrate, calcium phosphate, sodium chloride, potassium chloride, taurine, sodium L-ascorbate, maltodextrin, calcium hydroxide, emulsifier (lecithin), DL a-tocopheryl acetate, L-Ascorbyl palmitate, nicotinamide, calcium D-pantothenate, retinyl-acetate, thiamin hydrochloride, pyridoxine hydrochloride folic acid, phytomenadione, D-biotin, cholecalciferol.

DOMO[®]

This information is intended for industrial customers only and not intended for consumers.

Nutritional (g/100g)

Energy	**535 kcal
Total Protein Nx6.25	11.3
Total fat	31.2
Mono unsaturated fat	13.4
Poly unsaturated fat	4.8
Saturated	13.0
Linoleic acid	4.040
A-linolenic acid	0.56
Total carbohydrate	52.8
Sugars	51.3
Lactose	51.3

Minerals

Calcium	475 mg/100g
Phosphorus	250 mg/100g
Ratio Ca/P	1.9
Sodium	180 mg/100g
Potassium	640 mg/100g
Chloride	380 mg/100g
Magnesium	53 mg/100g
Zinc	*0.74 mg/100g
Iodine	*30 ug/100g
Manganese	*18 ug/100g
Selenium	*5.7 ug/100g

Chemical

Insolubility index	Max. 0.5ml
Scorched particles	Max. disc A
Bulk density	170-195 cm ³ /100g
pH	6.7-7.5
Moisture	< 2%

Sensoric

Appearance	Clear to slightly yellowish
Taste	Slightly sweet/milky

Vitamins

Vitamin A	670 ug/RE/100g
Retinol	670 ug/100g
Vitamin D3	10 ug/100g
Vitamin E	14 mg/100g
Vitamin K1	50 ug/100g
Vitamin B1	450 ug/100g
Vitamin B2	*585 ug/100g
Niacin	4.3 mg/100g
Vitamin B6	405 ug/100g
Folic acid	100 ug/100g
Pantothenic acid	3.2 mg/100g
Vitamin B12	*1.7 ug/100g
Biotin	14 ug/100g
Vitamin C	42 mg/100g
Choline	*85 mg/100g
Taurine	65 mg/100g
Inositol	*35 mg/100g
L-carnitine	*13 mg/100g

Microbiological

Total plate count 30°C	cfu/g n=5, c=2, m=1.000, M=10.000
Bacillus cereus spores and	cfu/g n=5, c=1, m=50, M=500
Yeasts and moulds	cfu/g n=5, c=2, m=10, M=100
Sulphite red. Clostridia ¹	cfu/g n=5, c=2, m=10, M=30
Clostridium perfringens	1g n=5, c=0, m=0, M=0
Coagulase-positive staphylococci	3x1g n=5, c=5, m=0/3, M=1/3
Enterobacteriaceae	10g n=10, c=0, m=0, M=0
E. coli ²	10g n=5, c=0, m=0, M=0
Salmonella ³	25g n=60, c=0, m=0, M=0
Cronobacter ⁴	10g n=30, c=0, m=0, M=0

* Typical value.

** According to EU legislation (EU/1169/2011).

References

1. If results 'Sulphite red. Clostridia/g' are within specification, it is allowed to skip 'Clostridium perfringens (1g)'.
2. If all samples are negative on 'Enterobacteriaceae (10x10g)', it is allowed to skip 'E. coli (10g)'.
3. For production locations of FrieslandCampina, automatic sampling must be applied: n>100 (Total sample size min. 1500 gram).
4. For production locations of FrieslandCampina, automatic sampling must be applied: n>100 (Total sample size min. 300 gram).

Potential consumer benefits are not to be considered as health claims. They should be considered as potential leads that might be developed into health claims complying with the local legal requirements.

FrieslandCampina Domo
Central office
Stationsplein 4
3818 LE Amersfoort
The Netherlands
Tel: +31 (0)33 713 33 33

FrieslandCampina Ingredients
Regional sales office Asia-Pacific
3 Temasek Avenue
#11-01 Centennial Tower
Singapore 039190
Tel: +65 6580 8100

FrieslandCampina Ingredients
Regional sales office China
2506, West tower of Twin Towers
B12 Jianguomenwai Ave, Chaoyang Dist.
Beijing, 100022, China
Tel: +86 10 6566 6099

FrieslandCampina Ingredients
Regional sales office North America
61 South Paramus Road, Suite 535
Paramus, NJ 07652, USA
Tel: +1 201 655 7786

FrieslandCampina Ingredients
Regional sales office Latin America
Rua dos Canários 65
Vinhedo, SP
13280 000 Brasil
Tel: +55 19 38266820

Please visit www.domo.nl or email info.domo@frieslandcampina.com

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