FRESENIUS KABI

Certificate of Analysis

Product	Fresubin Original		
Batch	28UCA960	Article	7038231
Date of manufacture			31. Mar. 2025
Use before end			Jun. 2026
Container	1000 ml EasyBag		
Filling volume	1000 ml		
Visual assessment	Conform		
Odour	Neutral, like grains possible, like protein possible		
Appearance	Beige emulsion		

Parameter	**Unit**	**Expected result**	**Test result**
pH			7.0
Density	g/ccm		1.065
Caloric value	kcal/100ml	100	102
Total fat	g/100ml	3.3	3.5
of which saturated fatty acids[1)]	g/100ml	0.3	0.3
of which monounsaturated fatty acids[1)]	g/100ml	2.2	2.2
of which polyunsaturated fatty acids[1)]	g/100ml	0.8	0.9
of which EPA + DHA	g/100ml	0.03	0.03
		[1)] as triglycerides	
Carbohydrates	g/100ml	14	14
of which sugars	g/100ml	0.9	0.6
of which lactose	g/100ml	≤ 0.03	< 0.05
Protein	g/100ml	3.8	3.9
Salt (Na x 2.5)	g/100ml	0.19	0.22
Water content	ml/100 ml	84	85
Osmolarity	mosmol/l	220	237
Osmolality	mosmol/kg	265	279
Minerals and trace elements			
Sodium	mg/100ml	75	86
Potassium	mg/100ml	125	108
Chloride	mg/100ml	115	112
Calcium	mg/100ml	80.0	72.0
Magnesium	mg/100ml	25.0	24.8
Phosphorus	mg/100ml	63.0	60.2
Iron	mg/100ml	1.3	1.4

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Quality Control
Runde ZZ 41
7881 HM Emmer-Compascuum
The Netherlands

Parameter	Unit	Expected result	Test result
Zinc	mg/100ml	1.2	1.1
Copper	mg/100ml	0.13	0.16
Manganese	mg/100ml	0.27	0.27
Iodine	µg/100ml	13.3	16.0
Fluoride	mg/100ml	0.13	0.17
Chromium	µg/100ml	6.7	6.0
Molybdenum	µg/100ml	10	10
Selenium	µg/100ml	6.7	6.8
Vitamins and other nutrients			
Total vitamin A	µg RE/100ml	92.0	108.0
of which ß-Carotene	µg RE/100ml	22.0	24.5
Vitamin D3	µg/100ml	1.3	1.5
Vitamin E	mg-a -TE/100ml	1.3	1.5
Vitamin K1	µg/100ml	6.7	7.3
Vitamin B1	mg/100ml	0.13	0.11
			accepted
Vitamin B2	mg/100ml	0.17	0.18
Niacin	mg/100ml	1.6	1.8
Niacinequivalents	mg NE/100ml	2.4	2.9
Vitamin B6	mg/100ml	0.16	0.17
Vitamin B12	µg/100ml	0.27	0.53
Pantothenic acid	mg/100ml	0.47	0.58
Biotin	µg/100ml	5.0	5.6
Folic acid	µg/100ml	26.7	35.8
Vitamin C	mg/100ml	6.7	17.6
Choline	mg/100ml	36.7	39.6
Microbiological parameters			
Incubation control 30°C			conform
Incubation control 40°C			conform
microbiological control			conform

Remarks

The attached certificate, with the full analysis of a random batch, is valid as reference for release in the target site of all later batches received by a term of 1 year along with the specific reduced batch analysis. The results of the batch analysis remain within the parameters established in the specifications throughout all the shelf life of the product.

21. May. 2025
Quality Control Plant Emmer-Compascuum

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