

Reference Material and Inter-laboratory Quality Control Materials Product Summary

May 2022

Version: 2

Assigned Values: Values provided have been generated from Inter-Laboratory Proficiency Programmes (ILPP) or from data provided by laboratories for the purpose of characterisation. The reference material values provided in this summary are the mean of the results after the exclusion of statistical outliers. The Assigned Range provided for the Inter-laboratory QC Materials is the range of test values available for purchase. Each Reference and QC Material comes with a Data Summary Sheet.

Missing Values and Available Tests: For Reference Materials where property values do not meet the statistical criteria, the summary values have not been provided. For this reason, not all tests will be available for every Reference Material of the same matrix. However, if there are 3 or more data points available, an Assigned Value will be provided with the corresponding QC material.

Sample Sizes: Available sample sizes are shown for reference materials.

Note: When ordering QC materials, please quote both the Product ID AND the process run

QC Material: Infant Formula - Stage 1 Cows Milk Infant Formula

Matrix: Infant Formula	Product ID Process Run Expiry Date Sample Size	12816-QC PR10022 17 Sep 22 150g	12063-QC PR9822 13 Nov 23 150g	13780-QC PR10068 2 Aug 24 150g
	Adenosine (5-Mono) (mg/100g)			4.43
	Alphalactalbumin (g/100g)			1.1
	Ascorbic Acid Vit C (mg/kg)	873		
	Ash (g/100g)			2.92
	a-Tocopherol eq. Vit E (mg/kg)	199		
	B-carotene (µg/100gm)	129.0		
	Biotin (mg/kg)	0.34		
	Calcium (mg/kg)		5290	
	Chloride (mg/kg)		5299	
	Cholecalciferol Vit D3 (mg/kg)	0.108		
	Choline (mg/kg)	878		
	Copper (mg/kg)		3.89	
	Cyanocobalamin Vit B12 (mg/kg)	0.0187		
	Cytidine (5-Mono) (mg/100g)			7.10

Fat (g/100g)			29.02
Folic Acid (mg/kg)	1.316		
Free Carnitine (mg/kg)			139
Galactooligosac (GOS) (%)			2.78
Guanosine (5-Mono) (mg/100g)			1.33
Inosine (5-Mono) (mg/100g)			2.64
Iodine (mg/kg)		1.25	
Iron (mg/kg)		54.6	
Magnesium (mg/kg)		555	
Manganese (mg/kg)		1.67	
Moisture 102oC (%)			2.33
myo-Inositol (mg/kg)			259.0
Niacinamide Vit B3 (mg/kg)	39		
Nucleotides (Total) (mg/100g)			19.80
Pantothenic Acid VitB5 (mg/kg)	43.2		
pH 10% solution (pH units)			7.09
Phosphorus (mg/kg)		3331	
Phylloquinone Vit K1 (mg/kg)	0.50		
Potassium (mg/kg)		6512	
Protein (g/100g)			12.31
Pyridoxine Vit B6 (mg/kg)	4.12		
Retinol eq. Vit A (mg/kg)	6.88		
Riboflavin Vit B2 (mg/kg)	7.93		
Selenium (mg/kg)		0.222	
Sodium (mg/kg)		2029	
Thiamine Vit B1 (mg/kg)	6.24		
Total Carnitine (mg/kg)			153
Total Fructan (FOS) (%)			1.36
Total Taurine (mg/100g)			30.81
Uridine (5-Mono) (mg/100g)			4.07
Zinc (mg/kg)		50.8	

Reference Material: Infant Formula - Stage 2 Cows Milk Infant Formula

Matrix: Infant Formula	Product ID	714-C-1
	Expiry Date	14 Nov 22
	Sample Size	150g
	Adenosine (5-Mono) (mg/100g)	1.69
	Arachidonic Acid (mg/100g)	63.96
	Cytidine (5-Mono) (mg/100g)	8.40
	Fat (g/100g)	27.41
	Guanosine (5-Mono) (mg/100g)	2.04
	Inosine (5-Mono) (mg/100g)	2.61
	Moisture 102oC (%)	1.95
	myo-Inositol (mg/kg)	359.2
	Nucleotides (Total) (mg/100g)	19.42
	pH 10% solution (pH units)	7.21
	Protein (g/100g)	10.49
	Total Carnitine (mg/kg)	133
	Total Taurine (mg/100g)	35.03
	Uridine (5-Mono) (mg/100g)	4.26

QC Material: Infant Formula - Stage 2 Cows Milk Infant Formula

Matrix: Infant Formula	Product ID Process Run Expiry Date Sample Size	12067-QC PR9776 14 Nov 22 150g	12064-QC PR9822 11 Nov 23 150g
	Adenosine (5-Mono) (mg/100g)	1.70	
	A-Linolenic Acid (mg/100g)	387.32	
	Alphalactalbumin (g/100g)	0.9	
	Arachidonic Acid (mg/100g)	65.15	
	Ash (g/100g)	2.33	
	Calcium (mg/kg)		7298
	Chloride (mg/kg)		5635
	Copper (mg/kg)		3.80
	Cytidine (5-Mono) (mg/100g)	8.41	
	Docosahexaenoic Acid (mg/100g)	55.74	
	Fat (g/100g)	27.41	
	Free Carnitine (mg/kg)	104	
	Galactooligosac (GOS) (%)	1.40	
	Guanosine (5-Mono) (mg/100g)	2.06	
	Inosine (5-Mono) (mg/100g)	2.56	
	Iodine (mg/kg)		1.65
	Iron (mg/kg)		83.2
	Linoleic Acid (mg/100g)	4300.00	
	Magnesium (mg/kg)		661
	Manganese (mg/kg)		3.32
	Moisture 102oC (%)	2.01	
	myo-Inositol (mg/kg)	360.0	
	Nucleotides (Total) (mg/100g)	19.30	
	pH 10% solution (pH units)	7.16	
	Phosphorus (mg/kg)		4676
	Potassium (mg/kg)		7410
	Protein (g/100g)	10.52	
	Selenium (mg/kg)		0.272

	Sodium (mg/kg)		2389
	Total Carnitine (mg/kg)	135	
	Total Taurine (mg/100g)	34.65	
	Uridine (5-Mono) (mg/100g)	4.38	
	Zinc (mg/kg)		48.0

Reference Material: Infant Formula - Stage 3 Cows Milk Infant Formula

Matrix: Infant Formula	Product ID	713-C-1
	Expiry Date	4 Jul 24
	Sample Size	150g
	Adenosine (5-Mono) (mg/100g)	5.72
	A-Linolenic Acid (mg/100g)	356.48
	Arachidonic Acid (mg/100g)	85.73
	Ash (g/100g)	3.24
	Docosahexaenoic Acid (mg/100g)	65.30
	Galactooligosac (GOS) (%)	0.89
	Guanosine (5-Mono) (mg/100g)	1.92
	Inosine (5-Mono) (mg/100g)	3.18
	Linoleic Acid (mg/100g)	3094.72
	Lutein (µg/100gm)	229
	Moisture 102oC (%)	2.42
	myo-Inositol (mg/kg)	814.8
	pH 10% solution (pH units)	6.81
	Protein (g/100g)	18.37
	Total Carnitine (mg/kg)	207
	Total Fructan (FOS) (%)	1.08
	Total Taurine (mg/100g)	35.09
	Uridine (5-Mono) (mg/100g)	5.58

QC Material: Infant Formula - Stage 3 Cows Milk Infant Formula

Matrix: Infant Formula	Product ID Process Run Expiry Date Sample Size	12066-QC PR10022 10 Nov 22 150g	12068-QC PR9776 4 Jul 24 150g	13779-QC PR10068 2 Aug 24 150g
	Adenosine (5-Mono) (mg/100g)		5.92	5.63
	A-Linolenic Acid (mg/100g)		360.00	
	Alphalactalbumin (g/100g)		1.1	0.8
	Arachidonic Acid (mg/100g)		86.05	
	Ascorbic Acid Vit C (mg/kg)	1743		
	Ash (g/100g)		3.24	3.41
	a-Tocopherol eq. Vit E (mg/kg)	198		
	B-carotene (µg/100gm)	168.0		
	Biotin (mg/kg)	0.58		
	Cholecalciferol Vit D3 (mg/kg)	0.109		
	Choline (mg/kg)	1306		
	Cyanocobalamin Vit B12 (mg/kg)	0.0400		
	Cytidine (5-Mono) (mg/100g)		11.05	8.91
	Docosahexaenoic Acid (mg/100g)		65.85	
	Fat (g/100g)		22.80	24.80
	Folic Acid (mg/kg)	1.300		
	Free Carnitine (mg/kg)		162	207
	Galactooligosac (GOS) (%)		1.03	
	Guanosine (5-Mono) (mg/100g)		1.97	1.53
	Inosine (5-Mono) (mg/100g)		3.31	3.14
	Linoleic Acid (mg/100g)		3072.96	
	Lutein (µg/100gm)		231	
	Moisture 102oC (%)		2.40	2.23
	myo-Inositol (mg/kg)		828.5	472.0
	Niacinamide Vit B3 (mg/kg)	73		
	Nucleotides (Total) (mg/100g)		27.60	23.99
	Pantothenic Acid VitB5 (mg/kg)	43.8		
	pH 10% solution (pH units)		6.75	7.07

	Phylloquinone Vit K1 (mg/kg)	0.75		
	Protein (g/100g)		18.55	13.82
	Pyridoxine Vit B6 (mg/ kg)	4.91		
	Retinol eq. Vit A (mg/kg)	8.16		
	Riboflavin Vit B2 (mg/ kg)	13.81		
	Thiamine Vit B1 (mg/kg)	7.91		
	Total Carnitine (mg/kg)		208	234
	Total Fructan (FOS) (%)		1.28	1.05
	Total Taurine (mg/100g)		34.89	35.21
	Uridine (5-Mono) (mg/ 100g)		5.60	4.75