NQAC
Nestlé
Quality Assurance Center

NQAC Clayville Analysis Portfolio

CHEMICAL TESTS - NUTRITIONAL FACTS & FOOD COMPOSITION ANALYSES					
Method Name	**Analyte**	**Sample amount**	**Quantification limit**	**Unit of measure**	**Method reference**
Total Nitrogen Kjeldhal Method	Protein	20g	0.02-0.04	g/100g	LI-00.556
Moisture-Karl Fischer	Moisture	20g	0.1	g/100g	LI-00.510-1
Total Dietary Fibre	Total Dietary Fibre	20g	0.5	g/100g	OM-985.29
Total Ash	Total Ash	50g	0.05	g/100g	LI-00.565
pH and Acidity	pH	50g	N/A	pH	LI-00.908
	Acidity		N/A	g/100g	
Moisture and Dry Matter content by Loss on Drying on Oven	Moisture	20g	0.05	g/100g	LI-50.011
	Dry matter total solids		0.05	g/100g	
Crude Fibre	Crude Fibre	50g	0.2	g/100g	LI-75.200
Sodium Chloride	Chloride	50g	15	mg/100g	LI-00.580-3
Fat Determination by Rose-Gottlieb Method	Total Fat	20g	0.12	g/100g	LI-00.521-1
Fat Acid Hydrolysis	Total Fat	20g	0.6	g/100g	LI-00.75.204
Nine Nutritional elements by ICP-OES	Sodium	50g	0.5	mg/100g	OM-AOAC-2011.14
	Calcium		15		
	Copper		0.5		
	Iron		5		
	Phosphorus		10		
	Magnesium		5		
	Manganese		5		
	Potassium		10		
	Zinc		0.5		
Total Iodine	Iodine	50g Original packaging or protected from light/oxygen	3	µg/100g	LI-00.849
Trace Elements	Aluminium	50g	0.1	µg/kg	LI-00.848
	Arsenic		2		
	Cadmium		2		

Method Name	Analyte	Sample amount	Quantification limit	Unit of measure	Method reference
Trace Elements	Chromium	50g	1	µg/100g	LI-00.848
Determination of Vitamin B12	Vitamin B12	50g Original packaging or protected from light/oxygen	0.1	µg/100g	AOAC 2014.02
Determination of Vitamin C by potentiometry	Vitamin C	100g Original packaging or protected from light/oxygen	5.0	mg/100g	LI-00.677-2
Determination of Vitamin D by HPLC	Vitamin D	50g Original packaging or protected from light/oxygen	1.7	µg/100g	LI-00.680-3
Determination of Vitamin A, E by HPLC	Vitamin A	100g Original packaging or protected from light/oxygen	10	µgRE/100g	LI-681-04
	Vitamin E		0.06	mgTE/100g	
Determination of Vitamin K1 by HPLC	Vitamin K1	100g Original packaging or protected from light/oxygen	2.5	µg/100g	LI-00.682-4
Determination of Caffeine by HPLC	Caffeine	20g	0.0003	g/100g	LI-20.020-2
Determination of Aflatoxin M1 by HPLC	Aflatoxin M1	100g	0.02	µg/kg	LI-00.114-3
Determination of Inositol by HPLC	Inositol	100g	1mg/100g	mg/100g	LI-00.684
Determination of Taurine by HPLC	Taurine	100g	0.5	mg/100g	LI-00.650-4
Determination of Tryptophan	Tryptophan	100g	0.01	g/100g	LI.00.589
Common Sugars by HPLC	Sucrose	100g	0.2	g/100g	LI 00.544-04
	Maltose				
	Fructose				
	Glucose				
	Lactose				
	Maltotriose				
Fatty acid Composition by Capillary GC-FID	Saturated, monosaturated, polinsaturated and trans fatty acid. Complete profile according to technical data sheet	200g	0.01- Mandatory total fat analysis	g/100g	LI 00 511-2
Determination of Vitamin B1, B2, B6, PP And Biotin By UHPLC/MS	Biotin	150g Original packaging or protected from light/oxygen	1.6	µg/100g	LI-00.610
	Thiamine base		0.1	mg/100g	
	Riboflavin		0.1		
	Niacin		0.5	mg/100g	LI-00.610
	Pyridoxine base		0.1		

Method Name	Analyte	Sample amount	Quantification limit	Unit of measure	Method reference
Total Amino Acids by AccQ-Tag & UHPLC-UV	Alanine	100g	0.01	g/100g	LI-00.594
	Arginine				
	Aspartic Acid				
	Cystine				
	Glutamic acid				
	Glycine				
	Histidine				
	Isoleucine				
	Leucine				
	Lysine				
	Methionine				
	Phenylalanine				
	Proline				
	Serine				
	Taurine		4	mg/100g	
	Threonine		0.01	g/100g	
	Tyrosine				
	Valine				
Determination of Pantothenic Acid by LCMS/MS	Pantothenic acid	100g Original packaging or protected from light/oxygen	0.1	mg/100g	ISO-20639:2015
Total Choline and Carnitine by Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)	Carnitine	100g			LI 00.686-1
	Choline				

MICROBIOLOGICAL TESTS

Method Name	Analyte	Sample amount	Quantification Limit	Unit of Measure	Method Reference
Quantitative Determination of Enterobacteriaceae by VRBG	Enterobacteriaceae	10g	-	CFU/g	ISO 21.528-2:2017
Detection of Cronobacter spp	Cronobacter final	10g	-		ISO 22964.2017
Enumeration of Lactic Acid Bacteria	Lactic Acid	25g	-	CFU/g	LI-00.731-2
Colony Count At 30 °C by Pour Plate technique	Colony	25g	-	CFU/g	ISO 4833:2003
Enumeration of Presumptive Bacillus cereus.	Presumptive Bacillus	25g	-	CFU/g	ISO-7932:2004
Qualitative Determination of Moulds and Yeasts in products with Water Activity less than 0,95	Moulds	25g	-	CFU/g	ISO-21527-2:2008
	Yeasts				
Qualitative Determination of Listeria spp - Presence/Absence (VIDAS LPT)	Listeria spp	10g	-	Presence/Absence	LI-00.705
Salmonella VIDAS® Easy SLM	Salmonella	10g	Per g, mL, or swab	Presence/Absence	LI-00.742
Quantitative Determination of Coagulase positive staphylococci	Coagulase positive staphylococci	25g	-	CFU/g	ISO 6888-1:1999
Counting of Sulfite reducing	Sulfite reducing anerobic bacteria mesophilic	25g	-	CFU/g	ISO-15213:2003