

Reference Material and Inter-laboratory Quality Control Materials Product Summary

May 2023

Version: 4

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: Anhydrous Milk Fat - Anhydrous Milk Fat

Matrix: Anhydrous Milk Fat	Product ID	13756-QC	13758-QC
	Process Run	PR10755	PR10755
	Expiry Date	22 Sep 23	29 Oct 23
	Sample Size	100mL	100mL
	Alkalinity (mg/kg)	3	4
	Carotene (mg/kg)	9.3	9.1
	Free Fatty Acids (%)	0.14	0.13
	Moisture KF (%)	0.06	0.06
	Peroxide Value (meqO2 /kg)	0.04	0.03

QC Material: Milk Powders for Bulk Density - Buttermilk Powder (100 taps)

Matrix: Milk Powders for Bulk Density	Product ID	13663-QC
	Process Run	PR10755
	Expiry Date	3 Nov 23
	Sample Size	160g
	Bulk Density 100 Taps (g/ml)	0.72

QC Material: Milk Powders for Bulk Density - Instant SMP (100 taps)

Matrix: Milk Powders for Bulk Density	Product ID	13664-QC
	Process Run	PR10755
	Expiry Date	3 Nov 23
	Sample Size	120g
	Bulk Density 100 Taps (g/ml)	0.76

QC Material: Milk Powders for Bulk Density - Skim Milk Powder (100 taps)

Matrix: Milk Powders for Bulk Density	Product ID	12985-QC
	Process Run	PR10628
	Expiry Date	1 Sep 23
	Sample Size	160g
	Bulk Density 100 Taps (g/ml)	0.76

QC Material: Milk Powders for Bulk Density - Whole Milk Powder (100 taps)

Matrix: Milk Powders for Bulk Density	Product ID	12986-QC
	Process Run	PR10755
	Expiry Date	3 Nov 23
	Sample Size	120g
	Bulk Density 100 Taps (g/ml)	0.58

QC Material: Protein Powders for Bulk Density - Mineral Acid Casein (35 taps test only)

Matrix: Protein Powders for Bulk	Product ID	13240-QC
	Process Run	PR10581
	Expiry Date	1 Aug 23
	Sample Size	170g
	Bulk Density 35 Taps (g/ml)	0.68

QC Material: Protein Powders for Bulk Density - Calcium Caseinate (35 taps test only)

Matrix: Protein Powders for Bulk	Product ID	12706-QC
	Process Run	PR10693
	Expiry Date	28 Sep 23
	Sample Size	85g
	Bulk Density 35 Taps (g/ml)	0.35

QC Material: Protein Powders for Bulk Density - WPC80 (Mineral Acid) 35 taps test only

Matrix: Protein Powders for Bulk	Product ID	14648-QC
	Process Run	PR10693
	Expiry Date	28 Sep 23
	Sample Size	100g
	Bulk Density 35 Taps (g /ml)	0.51

Reference Material: Butter - Salted Butter

Matrix: Butter	Product ID	815-C-1
	Expiry Date	1 Sep 23
	Sample Size	55g
	Salt (%)	1.40
	SNF (%)	2.51

QC Material: Butter - Salted Butter

Matrix: Butter	Product ID	13646-QC
	Process Run	PR10628
	Expiry Date	1 Sep 23
	Sample Size	55g
	Fat by Difference (%)	81.64
	Moisture Oven/Hot Plate (%)	15.85
	Salt (%)	1.41
	SNF (%)	2.56

Reference Material: Butter - Unsalted Butter

Matrix: Butter	Product ID	772-C-2
	Expiry Date	3 Nov 23
	Sample Size	55g
	Fat by Difference (%)	82.96
	Moisture Oven/Hot Plate (%)	15.65
	SNF (%)	1.38

QC Material: Butter - Unsalted Butter

Matrix: Butter	Product ID	13657-QC
	Process Run	PR10755
	Expiry Date	3 Nov 23
	Sample Size	55g
	Fat by Difference (%)	83.00
	Moisture Oven/Hot Plate (%)	15.65
	SNF (%)	1.39

QC Material: Butter for pH testing - Lactic Butter

Matrix: Butter for pH testing	Product ID	13658-QC
	Process Run	PR10628
	Expiry Date	1 Sep 23
	Sample Size	110g
	pH (pH units)	4.73

Reference Material: Casein - Lactic Acid Casein (30 Mesh)

Matrix: Casein	Product ID	776-C-1
	Expiry Date	20 Dec 23
	Sample Size	150g
	Ash (%)	1.79
	Fat SBR (%)	0.9
	Free Acidity (ml/g)	0.15
	Lactose (%)	0.12
	Moisture 102°C (%)	11.50
	Protein Kjeldahl (%)	86.72

QC Material: Casein - Lactic Acid Casein (30 Mesh)

Matrix: Casein	Product ID	12990-QC
	Process Run	PR10374
	Expiry Date	20 Dec 23
	Sample Size	150g
	Ash (%)	1.79
	Fat SBR (%)	0.8
	Free Acidity (ml/g)	0.16
	Lactose (%)	0.11
	Moisture 102°C (%)	11.50
	Part. Size Pass 1st Sieve (%)	100.0
	Part. Size Pass 2nd Sieve (%)	61.0
	pH (pH units)	4.3
	Protein Kjeldahl (%)	86.97

Reference Material: Casein - Mineral Acid Casein (30 Mesh)

Matrix: Casein	Product ID	775-C-1
	Expiry Date	30 Mar 24
	Sample Size	150g
	Ash (%)	1.70
	Fat SBR (%)	0.5
	Moisture 102°C (%)	9.27
	Protein Kjeldahl (%)	89.61

QC Material: Casein - Mineral Acid Casein (30 Mesh)

Matrix: Casein	Product ID	12991-QC
	Process Run	PR10374
	Expiry Date	30 Mar 24
	Sample Size	150g
	Ash (%)	1.69
	Fat SBR (%)	0.5
	Free Acidity (ml/g)	0.07
	Lactose (%)	0.02
	Moisture 102°C (%)	9.33
	Part. Size Pass 1st Sieve (%)	100.0
	Part. Size Pass 2nd Sieve (%)	41.6
	pH (pH units)	4.4
	Protein Kjeldahl (%)	89.78

Reference Material: Caseinate - Calcium Caseinate

Matrix: Caseinate	Product ID	774-C-1
	Expiry Date	17 Mar 24
	Sample Size	80g
	Ash (%)	3.98
	Fat SBR (%)	0.6
	Moisture 102°C (%)	4.84
	pH 5% Solution (pH units)	7.06
	Protein Kjeldahl (%)	91.86

QC Material: Caseinate - Calcium Caseinate

Matrix: Caseinate	Product ID	12992-QC
	Process Run	PR10374
	Expiry Date	17 Mar 24
	Sample Size	80g
	Ash (%)	3.98
	Fat SBR (%)	0.6
	Lactose (%)	0.04
	Moisture 102°C (%)	4.89
	pH 5% Solution (pH units)	7.04
	Protein Kjeldahl (%)	91.67

Reference Material: Caseinate - Sodium Caseinate

Matrix: Caseinate	Product ID	773-C-1
	Expiry Date	2 Aug 24
	Sample Size	80g
	Fat SBR (%)	0.6
	Moisture 102°C (%)	4.90
	pH 5% Solution (pH units)	6.69
	Protein Kjeldahl (%)	92.00

QC Material: Caseinate - Sodium Caseinate

Matrix: Caseinate	Product ID	12993-QC
	Process Run	PR10374
	Expiry Date	2 Aug 24
	Sample Size	80g
	Ash (%)	3.70
	Fat SBR (%)	0.5
	Lactose (%)	0.03
	Moisture 102°C (%)	4.97
	pH 5% Solution (pH units)	6.68
	Protein Kjeldahl (%)	91.87

Reference Material: Cheese - Edam Cheese

Matrix: Cheese	Product ID	810-C-1
	Expiry Date	10 Oct 23
	Sample Size	75g
	Moisture 105°C (%)	40.9
	pH (pH units)	5.38
	Salt (%)	1.92

QC Material: Cheese - Edam Cheese

Matrix: Cheese	Product ID	13682-QC
	Process Run	PR10628
	Expiry Date	10 Oct 23
	Sample Size	75g
	Calcium (mmol/kg)	199
	Fat SBR (%)	26.19
	Moisture 105°C (%)	40.8
	pH (pH units)	5.38
	Protein (%)	27.60
	Salt (%)	1.92

Reference Material: Cheese - Noble (Low Fat Cheddar) Cheese

Matrix: Cheese	Product ID	831-C-1
	Expiry Date	10 Oct 23
	Sample Size	75g
	Calcium (mmol/kg)	225
	Fat SBR (%)	25.83
	Moisture 105°C (%)	38.7
	pH (pH units)	5.58
	Protein (%)	29.53
	Salt (%)	1.96

QC Material: Cheese - Noble (Low Fat Cheddar) Cheese

Matrix: Cheese	Product ID	13685-QC
	Process Run	PR10755
	Expiry Date	10 Oct 23
	Sample Size	75g
	Calcium (mmol/kg)	228
	Fat SBR (%)	25.86
	Moisture 105°C (%)	38.6
	pH (pH units)	5.57
	Protein (%)	29.51
	Salt (%)	1.95

QC Material: Functional Powders - Instant WMP

Matrix: Functional Powders	Product ID	13697-QC	13695-QC	14666-QC	14667-QC	14665-QC
	Process Run	PR10628	PR10628	PR10755	PR10755	PR10755
	Expiry Date	1 Sep 23	1 Sep 23	3 Nov 23	3 Nov 23	3 Nov 23
	Sample Size	120g	120g	120g	120g	120g
	Coffee Sediment (mL)	0.5	0.3	0.4	0.4	0.2
	Cold SDP 25°C (A-E)	C	C	C	C	C
	Dispersibility (1_7)	1	2	1	1	2
	Sediment 85°C (mL)	0.2	0.2	0.2	0.2	0.2
	Wettability 25°C (secs)	11	11	6	6	7

QC Material: Lactose - Edible Lactose

Matrix: Lactose	Product ID	13698-QC
	Process Run	PR10495
	Expiry Date	8 Jun 25
	Sample Size	80g
	Moist LOD (%)	0.03
	pH 10% solution (pH units)	4.53
	Total Moisture KF (%)	5.00

QC Material: Lactose - Pharmaceutical Lactose

Matrix: Lactose	Product ID	13699-QC
	Process Run	PR10495
	Expiry Date	13 Jun 25
	Sample Size	80g
	Moist LOD (%)	0.05
	pH 10% solution (pH units)	4.32
	Total Moisture KF (%)	5.07

Reference Material: Powders for Micronutrients - WPC80 (Cheese)

Matrix: Powders for Micronutrients	Product ID	812-C-1
	Expiry Date	11 May 25
	Sample Size	30g
	Calcium (mg/100g)	306
	Chloride (mg/100g)	60
	Iron (mg/kg)	10.9
	Magnesium (mg/100g)	51.2
	Phosphorus (mg/100g)	439
	Potassium (mg/100g)	251
	Sodium (mg/100g)	1150

QC Material: Powders for Micronutrients - WPC80 (Cheese)

Matrix: Powders for Micronutrients	Product ID	13705-QC
	Process Run	PR10628
	Expiry Date	11 May 25
	Sample Size	30g
	Calcium (mg/100g)	314
	Chloride (mg/100g)	56
	Copper (mg/kg)	1.11
	Iodine (µg/100gm)	10
	Iron (mg/kg)	11.3
	Magnesium (mg/100g)	51.4
	Phosphorus (mg/100g)	447
	Potassium (mg/100g)	250
	Sodium (mg/100g)	1119
	Zinc (mg/kg)	3.4

Reference Material: Powders for Micronutrients - Instant WMP

Matrix: Powders for Micronutrients	Product ID	675-C-1	721-C-1	762-C-1	813-C-1
	Expiry Date	7 Oct 23	9 Apr 24	6 Nov 24	7 Apr 25
	Sample Size	30g	30g	30g	30g
	Calcium (mg/100g)	845	888		775
	Chloride (mg/100g)	552	877		572
	Copper (mg/kg)	0.36	0.14	0.24	0.15
	Iron (mg/kg)		109.7	1.5	109.1
	Magnesium (mg/100g)	72.7		72.2	
	Manganese (µg/100g)	26	26	21	
	Phosphorus (mg/100g)	703		655	588
	Potassium (mg/100g)	1040	1251	1050	810
	Sodium (mg/100g)		345	210	225
	Zinc (mg/kg)	51.2			

QC Material: Powders for Micronutrients - Instant WMP

Matrix: Powders for Micronutrients	Product ID	11693-QC	12710-QC	13702-QC	13703-QC	14682-QC
	Process Run	PR9571	PR9938	PR10289	PR10628	PR10755
	Expiry Date	7 Oct 23	9 Apr 24	6 Nov 24	7 Apr 25	9 Oct 25
	Sample Size	30g	30g	30g	30g	30g
	Calcium (mg/100g)	837	902	827	777	788
	Chloride (mg/100g)	553	884	600	571	577
	Copper (mg/kg)	0.37	0.13	0.25	0.15	0.24
	Iodine (µg/100gm)				42	
	Iron (mg/kg)	112.2	108.4		109.5	1.4
	Magnesium (mg/100g)	72.4	104.4	71.6	76.9	70.0
	Manganese (µg/100g)		26	22	29	22
	Phosphorus (mg/100g)	703	729	647	599	631
	Potassium (mg/100g)	1031	1243	1045	806	999
	Sodium (mg/100g)	211	346	211	226	204
	Zinc (mg/kg)	50.8	48.5	25.3	51.0	24.7

Reference Material: Powders for Micronutrients - WPC80 (Mineral Acid)

Matrix: Powders for Micronutrients	Product ID	677-C-1	719-C-1	761-C-1
	Expiry Date	17 Dec 23	20 Mar 24	24 Nov 24
	Sample Size	30g	30g	30g
	Calcium (mg/100g)		371	354
	Chloride (mg/100g)	127		105
	Copper (mg/kg)	0.46	0.38	0.50
	Iron (mg/kg)	3.2	4.2	3.2
	Magnesium (mg/100g)	24.8	28.0	22.5
	Manganese (µg/100g)		14	11
	Phosphorus (mg/100g)	353		
	Potassium (mg/100g)	1760	1810	1930
	Sodium (mg/100g)	43	81	38
	Zinc (mg/kg)	16.8	19.6	15.7

QC Material: Powders for Micronutrients - WPC80 (Mineral Acid)

Matrix: Powders for Micronutrients	Product ID	11689-QC	12751-QC	13704-QC	14685-QC
	Process Run	PR9571	PR9938	PR10289	PR10755
	Expiry Date	17 Dec 23	20 Mar 24	24 Nov 24	16 Sep 25
	Sample Size	30g	30g	30g	30g
	Calcium (mg/100g)	386	372	354	353
	Chloride (mg/100g)	130	149	104	112
	Copper (mg/kg)	0.47	0.38	0.53	0.58
	Iodine (µg/100gm)		165		
	Iron (mg/kg)	3.3	4.2	3.4	2.7
	Magnesium (mg/100g)	25.1	27.3	22.7	21.8
	Manganese (µg/100g)	12	14	11	11
	Phosphorus (mg/100g)		373	331	312
	Potassium (mg/100g)		1788	1924	1685
	Sodium (mg/100g)	44	82	38	39
	Zinc (mg/kg)	16.5	19.5	15.7	15.9

Reference Material: Powders for Micronutrients - Skim Milk Powder

Matrix: Powders for Micronutrients	Product ID	722-C-1	814-C-1	763-C-1
	Expiry Date	16 Feb 24	16 Feb 24	26 Dec 24
	Sample Size	30g	30g	30g
	Calcium (mg/100g)	1370	1349	1190
	Chloride (mg/100g)	1190	1186	1180
	Copper (mg/kg)			0.22
	Iron (mg/kg)	2.3		1.4
	Magnesium (mg/100g)	125.8	124.3	117.5
	Manganese (µg/100g)	42	40	26
	Phosphorus (mg/100g)	1040	1005	959
	Potassium (mg/100g)	1535	1492	1875
	Sodium (mg/100g)	448	437	385
	Zinc (mg/kg)	43.5	42.5	34.5

QC Material: Powders for Micronutrients - Skim Milk Powder

Matrix: Powders for Micronutrients	Product ID	12709-QC	13701-QC	13700-QC	14679-QC
	Process Run	PR9938	PR10628	PR10289	PR10755
	Expiry Date	16 Feb 24	16 Feb 24	26 Dec 24	13 Oct 25
	Sample Size	30g	30g	30g	30g
	Calcium (mg/100g)	1379	1369	1203	1200
	Chloride (mg/100g)	1190	1185	1178	1006
	Copper (mg/kg)	0.30	0.29	0.24	0.45
	Iodine (µg/100gm)		98		
	Iron (mg/kg)	2.3	2.5	1.4	1.5
	Magnesium (mg/100g)	126.0	124.4	116.0	112.6
	Manganese (µg/100g)	41	43	26	30
	Phosphorus (mg/100g)	1036	1017	957	1018
	Potassium (mg/100g)	1534	1501	1872	1790
	Sodium (mg/100g)	447	440	383	346
	Zinc (mg/kg)	43.1	43.7	34.5	34.8

Reference Material: Milk Powder - Buttermilk Powder

Matrix: Milk Powder	Product ID	764-C-1
	Expiry Date	11 Sep 24
	Sample Size	80g
	Moisture 102°C (%)	3.13
	Protein Kjeldahl (%)	30.39

QC Material: Milk Powder - Buttermilk Powder

Matrix: Milk Powder	Product ID	13661-QC	13662-QC	12982-QC
	Process Run	PR10755	PR10755	PR10289
	Expiry Date	5 Jan 24	17 Mar 24	11 Sep 24
	Sample Size	80g	80g	80g
	Fat RG (%)	7.57	9.91	8.34
	Insolubility Index 24°C (mL)	0.10	0.09	0.09
	Moisture 102°C (%)	3.61	3.77	
	Moisture Reference Dryer (%)	3.70	3.80	
	Protein Kjeldahl (%)	30.49	37.15	30.33
	Titrateable Acidity (%)	0.111	0.100	0.107

Reference Material: Milk Powder - Instant SMP

Matrix: Milk Powder	Product ID	725-C-2
	Expiry Date	26 Aug 24
	Sample Size	80g
	Fat RG (%)	0.64
	Moisture 102°C (%)	3.82
	pH (pH units)	6.74
	WPNI (mg/g)	3.7

QC Material: Milk Powder - Instant SMP

Matrix: Milk Powder	Product ID	12722-QC
	Process Run	PR10169
	Expiry Date	26 Aug 24
	Sample Size	80g
	Fat RG (%)	0.64
	Insolubility Index 24°C (mL)	0.09
	Moisture 102°C (%)	3.86
	pH (pH units)	6.75
	Protein Kjeldahl (%)	32.94
	Titrateable Acidity (%)	0.094
	WPNI (mg/g)	3.9

Reference Material: Milk Powder - Skim Milk Powder

Matrix: Milk Powder	Product ID	781-C-1	811-C-1	782-C-1
	Expiry Date	20 Jan 25	28 Feb 25	28 Mar 25
	Sample Size	80g	80g	80g
	Fat RG (%)	0.86	0.87	0.68
	Moisture 102°C (%)	3.85	3.78	3.86
	pH (pH units)	6.74	6.73	6.66
	Protein Kjeldahl (%)	32.70	32.62	32.76
	WPNI (mg/g)	6.4	6.5	3.6

QC Material: Milk Powder - Skim Milk Powder

Matrix: Milk Powder	Product ID	13730-QC	13731-QC	13729-QC
	Process Run	PR10411	PR10628	PR10411
	Expiry Date	20 Jan 25	28 Feb 25	28 Mar 25
	Sample Size	80g	80g	80g
	Fat RG (%)	0.88	0.88	0.70
	Insolubility Index 24°C (mL)	0.11	0.09	0.09
	Moisture 102°C (%)	3.84	3.78	3.87
	Moisture Reference Dryer (%)	3.84	3.93	3.86
	pH (pH units)	6.73	6.72	6.69
	Protein Kjeldahl (%)	32.61	32.54	32.67
	Titrateable Acidity (%)	0.087	0.098	0.097
	WPNI (mg/g)	6.4	6.5	3.7

QC Material: Milk Powder - Skim Milk Powder

Matrix: Milk Powder	Product ID	13785-QC
	Process Run	PR10454
	Expiry Date	4 Nov 23
	Sample Size	30g
	RDW WPNI Low Heat SMP (mg/g)	6.52

Reference Material: Milk Powder - Whole Milk Powder

Matrix: Milk Powder	Product ID	750-C-1	786-C-1	794-C-1	793-C-1
	Expiry Date	1 Sep 23	17 Jan 24	28 Jan 24	6 Mar 24
	Sample Size	80g	80g	80g	80g
	Ash (%)	5.61	5.81		
	Fat RG (%)	26.41	26.40		28.49
	Free Fat - in powder (%)	0.59	1.33	1.01	1.05
	Moisture 102°C (%)	2.78	3.16	3.13	
	Moisture KF (%)	3.22			
	pH (pH units)	6.65			
	Protein Kjeldahl (%)	24.94	24.20	23.53	23.43
	WPNI (mg/g SNF)	2.8	2.9		2.0

QC Material: Milk Powder - Whole Milk Powder

Matrix: Milk Powder	Product ID	12962-QC	12964-QC	12963-QC
	Process Run	PR10169	PR10411	PR10411
	Expiry Date	1 Sep 23	17 Jan 24	28 Jan 24
	Sample Size	80g	80g	80g
	Ash (%)	5.62	5.86	4.63
	Fat RG (%)	26.35	26.38	28.51
	Free Fat - in powder (%)	0.58	1.30	0.98
	Insolubility Index 24°C (mL)	0.10	0.19	0.20
	Moisture 102°C (%)	2.83	3.17	3.13
	Moisture KF (%)	3.20	3.54	3.53
	Moisture Reference Dryer (%)		3.23	3.23
	pH (pH units)	6.63	6.69	6.74
	Protein Combustion (%)		24.24	23.69
	Protein Kjeldahl (%)	24.91	24.24	23.55
	Titrateable Acidity (%)	0.113	0.108	0.086
	WPNI (mg/g SNF)	2.7	3.0	2.0

Reference Material: Milk Protein Concentrate - MPC42

Matrix: Milk Protein Concentrate	Product ID	822-C-1
	Expiry Date	12 Oct 23
	Sample Size	80g
	Moisture 102°C (%)	3.32
	pH 5% Solution (pH units)	6.99
	Protein Kjeldahl (%)	42.85

QC Material: Milk Protein Concentrate - MPC42

Matrix: Milk Protein Concentrate	Product ID	13710-QC
	Process Run	PR10755
	Expiry Date	12 Oct 23
	Sample Size	80g
	Ash (%)	5.57
	Fat RG (%)	25.95
	Insolubility Index 40°C (mL)	0.12
	Moisture 102°C (%)	3.30
	pH 5% Solution (pH units)	6.98
	Protein Kjeldahl (%)	42.86
	Tit Acidity 5% Solution (%m/m)	0.844
	WPNI (mg/g)	6.4

Reference Material: Milk Protein Concentrate - MPC56

Matrix: Milk Protein Concentrate	Product ID	791-C-1
	Expiry Date	4 Feb 24
	Sample Size	80g
	Fat RG (%)	0.90
	Moisture 102°C (%)	4.77
	Protein Kjeldahl (%)	56.51

QC Material: Milk Protein Concentrate - MPC56

Matrix: Milk Protein Concentrate	Product ID	13709-QC
	Process Run	PR10534
	Expiry Date	4 Feb 24
	Sample Size	80g
	Ash (%)	7.43
	Fat RG (%)	0.91
	Insolubility Index 40°C (mL)	0.09
	Moisture 102°C (%)	4.73
	pH 5% Solution (pH units)	7.03
	Protein Kjeldahl (%)	56.62
	Tit Acidity 5% Solution (%m/m)	1.101
	WPNI (mg/g)	10.3

QC Material: Milk Protein Concentrate - MPC70

Matrix: Milk Protein Concentrate	Product ID	13711-QC
	Process Run	PR10628
	Expiry Date	17 Oct 24
	Sample Size	80g
	Ash (%)	7.22
	Fat RG (%)	1.48
	Insolubility Index 40°C (mL)	0.47
	Moisture 102°C (%)	4.79
	pH 5% Solution (pH units)	7.02
	Protein Kjeldahl (%)	70.54
	Tit Acidity 5% Solution (%m/m)	1.104
	WPNI (mg/g)	14.8

Reference Material: Milk Protein Concentrate - MPC80

Matrix: Milk Protein Concentrate	Product ID	783-C-1
	Expiry Date	15 Nov 23
	Sample Size	80g
	Ash (%)	7.13
	Fat SBR (%)	1.20
	Lactose (%)	8.61
	pH 5% Solution (pH units)	7.04

QC Material: Milk Protein Concentrate - MPC80

Matrix: Milk Protein Concentrate	Product ID	13715-QC
	Process Run	PR10411
	Expiry Date	15 Nov 23
	Sample Size	80g
	Ash (%)	7.10
	Fat SBR (%)	1.18
	Lactose (%)	8.51
	Moisture 102°C (%)	5.66
	pH 5% Solution (pH units)	7.05
	Protein Kjeldahl (%)	77.87
	WPNI (mg/g)	0.5

Reference Material: Milk Protein Concentrate - MPI

Matrix: Milk Protein Concentrate	Product ID	733-C-1
	Expiry Date	5 Sep 23
	Sample Size	80g
	Fat SBR (%)	1.23
	Lactose (%)	1.47
	pH 5% Solution (pH units)	6.86

QC Material: Milk Protein Concentrate - MPI

Matrix: Milk Protein Concentrate	Product ID	12717-QC
	Process Run	PR10074
	Expiry Date	5 Sep 23
	Sample Size	80g
	Fat SBR (%)	1.24
	Lactose (%)	1.51
	Moisture 102°C (%)	5.53
	pH 5% Solution (pH units)	6.87
	Protein Kjeldahl (%)	85.79

QC Material: Milk Powder Nitrate / Nitrite - Instant WMP

Matrix: Milk Powder Nitrate / Nitrite	Product ID	14461-QC
	Process Run	PR10628
	Expiry Date	15 Aug 23
	Sample Size	15g
	Nitrate (mg/kg)	24.2
	Nitrite (mg/kg)	3.0

Reference Material: Vitamin Milk Powders - Instant SMP

Matrix: Vitamin Milk Powders	Product ID	766-C-1	821-C-1
	Expiry Date	30 Aug 23	3 May 24
	Sample Size	30g	30g
	Vitamin A (µg/100gm)	1018	
	Vitamin C (mg/100g)	11.7	15.4

QC Material: Vitamin Milk Powders - Instant SMP

Matrix: Vitamin Milk Powders	Product ID	12727-QC	13736-QC
	Process Run	PR10289	PR10755
	Expiry Date	30 Aug 23	3 May 24
	Sample Size	30g	30g
	Vitamin A (µg/100gm)	997	
	Vitamin C (mg/100g)	11.1	15.6
	Vitamin D (µg/100gm)	6.1	

Reference Material: Vitamin Milk Powders - Instant WMP

Matrix: Vitamin Milk Powders	Product ID	760-C-1	780-C-1
	Expiry Date	30 Aug 23	2 Nov 23
	Sample Size	30g	30g
	Vitamin A (µg/100gm)	414	929
	Vitamin C (mg/100g)	71.7	63.7

QC Material: Vitamin Milk Powders - Instant WMP

Matrix: Vitamin Milk Powders	Product ID	13733-QC	13735-QC
	Process Run	PR10289	PR10411
	Expiry Date	30 Aug 23	2 Nov 23
	Sample Size	30g	30g
	Vitamin A (µg/100gm)	418	930
	Vitamin C (mg/100g)	71.6	64.1
	Vitamin D (µg/100gm)	6.2	

QC Material: Vitamin Milk Powders - Whole Milk Powder

Matrix: Vitamin Milk Powders	Product ID	13734-QC
	Process Run	PR10755
	Expiry Date	3 May 24
	Sample Size	30g
	Vitamin C (mg/100g)	63.0

Reference Material: Whey Powder - Whey Powder

Matrix: Whey Powder	Product ID	818-C-1
	Expiry Date	7 Jun 25
	Sample Size	80g
	Fat RG (%)	0.98
	Protein Kjeldahl (%)	17.63

QC Material: Whey Powder - Whey Powder

Matrix: Whey Powder	Product ID	13741-QC
	Process Run	PR10693
	Expiry Date	7 Jun 25
	Sample Size	80g
	Ash (%)	8.43
	Fat RG (%)	0.95
	Insolubility Index 24°C (mL)	0.09
	Moisture 102°C (%)	1.75
	pH (pH units)	6.86
	Protein Kjeldahl (%)	17.62
	Salt (%)	2.52
	Titrateable Acidity (%)	0.057

Reference Material: Whey Protein Concentrate - WPC80 (Cheese)

Matrix: Whey Protein Concentrate	Product ID	742-C-1	788-C-1
	Expiry Date	22 Aug 23	22 Feb 24
	Sample Size	80g	80g
	Ash (%)		3.18
	Fat SBR (%)	3.8	4.5
	Lactose (%)	7.4	5.2
	Moisture 102°C (%)	4.40	4.58
	pH 5% Solution (pH units)	6.71	
	Protein Kjeldahl (%)	78.95	80.36

QC Material: Whey Protein Concentrate - WPC80 (Cheese)

Matrix: Whey Protein Concentrate	Product ID	12733-QC	13745-QC
	Process Run	PR10109	PR10495
	Expiry Date	22 Aug 23	22 Feb 24
	Sample Size	80g	80g
	Ash (%)	3.23	3.10
	Fat SBR (%)	3.8	4.5
	Insolubility Index 24°C (mL)	0.21	0.13
	Lactose (%)	7.4	4.8
	Moisture 102°C (%)	4.42	4.58
	pH 5% Solution (pH units)	6.69	6.84
	Protein Kjeldahl (%)	78.95	80.34

Reference Material: Whey Protein Concentrate - WPC80 (Lactic Acid)

Matrix: Whey Protein Concentrate	Product ID	787-C-1
	Expiry Date	19 Mar 24
	Sample Size	80g
	Ash (%)	3.41
	Fat SBR (%)	3.6
	Lactose (%)	4.9
	Moisture 102°C (%)	5.20
	pH 5% Solution (pH units)	6.67
	Protein Kjeldahl (%)	79.99

QC Material: Whey Protein Concentrate - WPC80 (Lactic Acid)

Matrix: Whey Protein Concentrate	Product ID	13747-QC
	Process Run	PR10495
	Expiry Date	19 Mar 24
	Sample Size	80g
	Ash (%)	3.45
	Fat SBR (%)	3.5
	Insolubility Index 24°C (mL)	0.11
	Lactose (%)	4.8
	Moisture 102°C (%)	5.23
	pH 5% Solution (pH units)	6.66
	Protein Kjeldahl (%)	80.04