Calcium Caseinate 385



PB.020

Version 1.0511

UNRESTRICTED

Calcium Caseinate 385 from Fonterra is a spray dried milk protein powder, surface treated with food grade glycerol mono oleate. This caseinate is readily dispersible in water to form a stable colloidal suspension. The bland flavour and excellent flavour stability of the Calcium Caseinate 385 makes it suitable for use in flavour sensitive formulations.

Product Characteristics

- Excellent dispersibility
- Very good nutritional value
- · High calcium, low sodium content
- High opacity in water suspension

Suggested Uses

- High protein beverage powders
- Nutrition bars
- Instant soup mixes

Packaging

Multi-wall paper which incorporates a moisture barrier and contains the product within an inner polyethylene bag. No staples or metal fasteners are used.

Net Weight	20.0 kg
Gross Weight	20.4 kg

Storage and Handling

Caseinates are hygroscopic and can absorb odours. Therefore adequate protection is essential. It is recommended that product is stored at temperatures below 25°C, relative humidity below 65% and in an odour free environment. Stocks should be used in rotation preferably within 24 months of manufacture.

Typical Compositional Analysis

The analysis results listed in this product bulletin are typical as measured on an "as is" basis. Refer to the selling specification for minimum & maximum limits by parameter.

Protein (N x 6.38) (g/100g) as is	92.1
Moisture (g/100g)	3.9
Fat (g/100g)	1.5
Total Carbohydrate (g/100g)	0.1
Ash (g/100g)	3.9
Inhibitory substances (IU/ml)	<0.005

Typical Nutritional Analysis

Energy (kJ/100g)	1620
Calories (kcal/100g)	390
Energy from fat (kJ/100g)	56
Calories from fat (kcal/100g)	13
Total Sugars (lactose) (g/100g)	0.1
Fibre (g/100g)	0
Cholesterol (mg/100g)	20
Saturated fat (g/100g)	1.1
Trans fat (g/100g)	0.05
Vitamin A (μg/100g)	<6
Vitamin A (IU/100g)	<20
Vitamin C (mg/100g)	<0.4
Iron (mg/100g)	0.88
Sodium (mg/100g)	5
Calcium (mg/100g)	1380

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Typical Physical Properties

Colour	White to light Cream
Flavour	Clean
pH(5% at 20°C)	7.0
Bulk density (packed, g/mL)	0.35
Scorched particles (50g)	Disc A

Typical Microbiological Analysis

Aerobic Plate Count (cfu/g)	<3,000
Coliforms (cfu/g)	<1
E. coli (/g)	Not Detected
Yeast & mould (cfu/g)	<10
Staph. coag. pos. (/g)	Not Detected
Salmonella (750g)	Absent
Listeria (25g)	Absent

Quality Assurance

Strict quality control procedures are enforced during manufacture. The manufacturing environment is also subject to regular monitoring and control.

Final product is sampled and tested for chemical, sensory and microbial parameters using internationally recognised procedures.

During storage and shipment, precautions are taken to ensure that the product quality is maintained. Each package is identified, enabling traceback.

Compliance

- Kosher
- Halal

Suggested Labelling

Calcium Caseinate, Monoglycerides (E471)

Allergens: Contains Milk and Dairy products

Country regulations for product labelling vary. Fonterra advises customers that they need to check local regulations to determine the correct labelling of this ingredient

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NUTRITIONAL BULLETIN

Typical Amino Acid Profile Acid Casein and Caseinates



NB.047

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The typical value is an average of representative samples taken from across the manufacturing season.

Essential amino acids

Amino acid	Typical amount per 100g of Protein
Isoleucine	5.3 g
Leucine	9.4 g
Lysine	8.0 g
Methionine	3.0 g
Phenylalanine	5.2 g
Threonine	4.3 g
Tryptophan	1.3 g
Valine	6.7 g

Non-Essential amino acids

Amino acid	Typical Amount per	100g of Protein
Histidine (Essent	ial for infants)	2.8 g
Alanine		3.0 g
Arginine		3.8 g
Aspartic acid		7.1 g
Cysteine/cystine		0.7 g
Glutamic acid		22.3 g
Glycine		1.9 g
Proline		11.0 g
Serine		5.8 g
Tyrosine		5.8 g

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