

Whey Protein Concentrate 450 Instantised

PRODUCT BULLETIN

PB.015 (SS1)
Version 2.1004

NZMP Whey Protein Concentrate 450 (also known as ALACEN™ 450) from Fonterra is an instantised, soluble milk protein manufactured from fresh cheese whey using an ultra-filtration process. NZMP Whey Protein Concentrate 450 is ideal for dry mix beverage due to high nutritional value, excellent solubility throughout the pH range, and enhanced dispersibility.

PRODUCT CHARACTERISTICS

- Excellent dispersibility
- Soluble over a wide pH range
- Excellent nutritional value
- Improved handling properties

SUGGESTED USES

- Dry mix beverages
- Nutritional products

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

Whey Protein Concentrates 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.

The analysis results listed in this product bulletin are typical. Refer to the selling specification for minimum & maximum limits by parameter.

TYPICAL COMPOSITIONAL ANALYSIS

Protein (N x 6.38) (g/100g)	79.8
Moisture (g/100g)	4.1
Fat (g/100g)	7.2
Total Carbohydrate (g/100g)	6.1
Ash (g/100g)	2.8
Inhibitory substances (IU/ml)	<0.005

TYPICAL NUTRITIONAL ANALYSIS

Energy (kJ/100g)	1,730
Calories (kcal/100g)	415
Energy from fat (kJ/100g)	266
Calories from fat (kcal/100g)	64
Total Sugars (lactose) (g/100g)	6.1
Fibre (g/100g)	0
Cholesterol (mg/100g)	220
Saturated fat (g/100g)	5.0
Trans fat (g/100g)	0.5
Vitamin A (µg/100g)	<3
Vitamin A (IU/100g)	<10
Vitamin C (mg/100g)	<0.4
Iron (mg/100g)	1.0
Sodium (mg/100g)	170
Calcium (mg/100g)	390



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TYPICAL PHYSICAL PROPERTIES

Colour	Cream
Flavour	Clean
pH(5% at 20°C)	6.7
Bulk density (packed, g/mL)	0.40
Scorched particles (50g)	Disc A

TYPICAL MICROBIOLOGICAL ANALYSIS

Aerobic Plate Count (cfu/g)	<30,000
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

- Halal

SUGGESTED LABELLING

Whey Protein Concentrate and Soy Lecithin

Allergens: Contains Milk and Dairy products, Soy.

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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SELLING SPEC

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CHEMICAL	UNITS	MIN.	MAX.
Protein (N x 6.38) Dry Basis	% m/m	80.0	
Ash	% m/m		4.0
Moisture (Atmospheric Oven)	% m/m		5.5
Fat	% m/m		9.0
pH (5% at 20°C)	pH	6.5	7.2

MICROBIOLOGICAL	UNITS	MIN.	MAX.
Aerobic Plate Count	cfu/g		30,000
E.coli	/g		Not Detected
Yeast & mould	cfu/g		50
Staph. Coag.Pos	cfu/g		10
Salmonella	/750g		Absent
Listeria	/25g		Absent

PHYSICAL	UNITS	MIN.	MAX.
Scorched particles (ADPI)	/50g		B
Foreign matter	/50g		Not detected

SENSORY	UNITS	MIN.	MAX.
Flavour and Odour		Typical	

OTHER
Meets Codex standards for Lead
Meets Codex standards for Heavy metals
Meets Codex standards and FDA/EPA limits for Pesticides
Meets FDA requirements for Phosphatase
Meets FDA and NZFSA requirements for Inhibitory substances



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