Technical Data Sheet

Date: May 2024

Version: 2024-01

Milk Protein Concentrate (MPC) 85%

Description

Spray dried milk protein concentrate manufactured by ultrafiltration of skim milk resulting in a casein-to-whey protein ratio equivalent to that of the original milk, generally a value of 80:20

Composition

Bovine milk protein

Properties

- Free flowing powder
- Good heat stability
- Excellent dispersibility
- Good solubility
- Excellent flavor

Applications.

- Nutritional beverages
- Low fat spreads
- Protein bars
- Frozen desserts
- Bakery and confectionary products
- Cultured products
- Dairy based dry mixes
- Processed cheese
- Feta cheese
- Pediatric nutrition

Chemical Specifications

Parameter	Limit Value	Test Method
Moisture	Max 5%	ISO 5537- IDF 26
Fat	Max 4%	ISO 23318- IDF 249
Protein	83-87%	ISO 8968-1- IDF 20-1
(DMB)*		
рН	6.8-7.10	10% Solution
Lactose	Max 18%	ISO 22662:2024- IDF 198
Titratable	11.5-14.5°D	ISO 6091- IDF 86
Acidity		
Ash	Max 8%	AOAC 930.30-1930
Scorched	Disc A*	ISO 5739- IDF 107
Particle		
*7.5mg in 25 g *DMB: Dry Matter Basis		

Packaging

This product is packed in 25Kg paper bags with composite liners to avoid environmental damages and cross contaminations.

Storage and Handling

Store in the original sealed packing in ambient condition (under 25°C and maximum RH of 65%) without exposure to direct sunlight and away from moisture in a hygienic environment. MPC powders are hygroscopic and absorbs odor so it should be kept at odor free environment.

Shelf Life

24 months if kept under the prescribed storage conditions.

Microbiological Specifications

Parameter	Limit Value	Test Method
Mesophilic	Max 10 ⁵ CFU/g	ISO 4833-1
Total count		
Coliform	Max 10 CFU/g	ISO 4832
Salmonella	Negative	ISO 6579-1
Yeast & Molds	Max 100 CFU/g	ISO 6611- IDF 94
E. coli	Negative	ISO 11866-2
Coagulase-	Negative	ISO 6888-3
positive		
Staphylococci		

Contaminations Specifications

Parameter	Limit Value	Test Method
Aflatoxin M1	Max 1 ppb	ISO 14501-IDF 171
Lead	Max 0.02 ppm	AOAC 999.11

Antibiotic – Not Detected – tested on twinsensor rapid test (KIT035) for tetracycline, β -lactam and sulfonamide.

Labelling

Labelled in accordance with standards below:

- Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1; 1985 (Rev. 1-1991))
- Codex General Standard for the Use of Dairy Terms (CODEX STAN 206; 1999)
- Codex commodity standards for individual milk products

Allergens

Milk and milk Products thereof (including Lactose)

GMO

Not submitted to the EU regulations n° 1829/2003 and 1830/2003 relating to Genetically Modified (GM) food and feed

Nutritional Information

Content (per 10	00g)
386 Kcal (1617.9528	3 KJ)
	85 g
	7 g
	2 g
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