# **Technical Data Sheet**

# Milk Protein Concentrate (MPC) 60%

Date: May 2024 Version: 2024-01

## **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	<b>Limit Value</b>	Test Method
Moisture	Max 5%	ISO 5537- IDF 26
Fat	Max 3%	ISO 23318- IDF 249
Protein	58-62%	ISO 8968-1- IDF 20-1
рН	6.5-7.2	10% Solution
Lactose	18-31%	ISO 22662:2024- IDF 198
Titratable	11.5-14.5°D	ISO 6091- IDF 86
Acidity		
Ash	Max 9%	AOAC 930.30-1930
Scorched	Disc A*	ISO 5739- IDF 107
Particle		
*7 Emg in 2E g		

<sup>\*7.5</sup>mg in 25 g

## **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	<b>Test Method</b>
Mesophilic	Max 10 <sup>5</sup> 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 – No	t Detected – teste	d on twinsensor rapid

Antibiotic – Not Detected – tested on twinsensor rapid test (KIT035) for tetracycline,  $\beta$ -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**

Parameter	Content (per 100g)
Energy	348.3 Kcal (1457.2872KJ)
Protein	59.7 g
Carbohydrate	24 g
Fat	1.5 g

