

## Grade A Milk Protein Concentrate 70% Specification

Grade A Milk Protein Concentrate 70% is a spray dried, free flowing milk protein and is an equivalent replacement for conventional nonfat dry milk. MPC70 is made by processing Grade A skim milk by ultrafiltration, which removes a portion of the lactose. The resulting concentrated milk proteins are subjected to evaporation and spray drying. This product is manufactured in the USA

<b><i>Chemistry Parameters</i></b>	<b><i>Analysis</i></b>	<b><i>Method</i></b>	<b><i>Allergen</i></b>	Milk (Bovine)
Protein	≥ 69.5%	FT-NIR/AOAC 991.20		
Moisture	≤ 6.00%	FT-NIR/ADPI		
Fat	≤ 2.00%	FT-NIR/AOAC 989.05		
Lactose	≤ 19.0 %	Calculation		
Scorched Particles	7.5 to 15 mg	ADPI (Disc A or B)		
Solubility Index	≤ 1.00	SMEDP 15.171		
Ash	≤ 7.5%	SMEDP 15.041		
pH	6.5-7.1	SMEDP 15.022		
Bulk Density	≥ 0.41 g/ml	USP		
Antibiotic Residues	Negative	Charm SL3		
<b><i>Microbiological Parameters</i></b>				
Standard Plate Count	≤ 30,000 cfu/g	SMEDP 6.020		
Coliforms	< 10 cfu/g	SMEDP 7.020		
Salmonella	Negative/375g	ANSR/AOAC 2013.14		
Staphylococcus aureus	Negative	AOAC 17.5.09		
E. coli	Negative	SMEDP 7.074		
Listeria	Negative	ANSR/AOAC 2013.14		
Yeast & Mold	≤ 50 cfu/g	SMEDP 8.111		
<b><i>Nutritional Proximates (per 100g)</i></b>				
Calories	358.40kcal	Vitamin A <25.00IU		
Protein	69.89g	Vitamin C 12.55mg		
Total Fat	1.06g	Vitamin D <6 IU		
Water	4.66g	Calcium 1923.46mg		
Carbohydrates	17.34g	Iron <1.00mg		
Dietary Fiber	<0.50g	Sodium 181.02mg		
Ash	7.07g	Cholesterol 56.89mg		
<b><i>Sensory &amp; Physical Standards</i></b>				
Appearance / Color	Powder, free of lumps / White to light cream			
Flavor / Odor	Clean, bland, sweet / Fresh, no off odors			
<b><i>Regulatory Compliance</i></b>				
CODEX	✓	Gluten Free	✓	
GFSI (SQF)	✓	Vegetarian	✓	
Halal	✓	Kosher	✓	
<b><i>Storage</i></b>				
Product should be stored in a cool (≤25°C), dry (≤RH 65%) place protected from foreign odors & other contaminants.				
<b><i>Shelf Life</i></b>				
Under proper storage conditions, the shelf life of this product is 24 months.				
<b><i>Packaging</i></b>				
20kg (net weight) Multiwall kraft bags with polyethylene inner liner or another approved closed container, palletized on Heat Treated pallets.				

Spec - 0021 MU70C

Reviewed: Dave Kedzierski  
SVP, Business Transformation

Rev. 07/27/2022

SS. 01/31/2021

SS. = *Supersedes*