

Whole Milk Powder (WMP) Standard

Product Definition

Whole Milk Powder (WMP) is the product resulting from the partial removal of water from pasteurized milk. The fat and/or protein content of the milk may have been adjusted, only to comply with the compositional requirements below, by the addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted.

The following milk products are allowed for protein adjustment purposes:

- Milk retentate: the product obtained by concentrating milk protein by ultrafiltration of milk, partly skimmed milk, or skimmed milk;
- Milk permeate: the product obtained by removing milk proteins and milkfat from milk, partly skimmed milk, or skimmed milk by ultrafiltration; and
- Lactose

Composition

Classification	Protein (percent protein in milk solids-not-fat)*	Fat	Moisture
WMP	Min. 34%	Min.. 26% Max. 42%	Max. 4.5%*

* The moisture content does not include water of crystallization of the lactose, the milk solids-not-fat content includes the water of crystallization of the lactose.

Other Characteristics

Scorched Particle Content
Titratable acidity
Color
Flavor
Solubility index
Staphylococcus < 10 cfu/g

≤ 15.0 mg
≤ .18%
white to cream
bland, clean
<1.0 ml

Microbiological Analysis

Standard Plate Count ≤ 30,000 cfu/g
Coliform ≤ 10 cfu/g
Salmonella negative
Listeria negative
Coagulase positive
Yeast & Mold ≤ 100 cfu/g

Methods of Analysis

Criteria	Reference Method
Protein	ISO 8968-1/IDF 20 part 1
Fat	ISO 1736/IDF 9C
Moisture	ISO 5537/IDF 26

Product Labeling

Product should be labeled as: “Whole Milk Powder”

WMP Labeling Regulatory Compliance

Whole Milk Powder may be produced with or without protein adjustment. WMP produced without protein adjustment is equivalent to dry whole milk (DWM) and may be used interchangeably. However WMP produced with protein adjustment does not comply with the US Standard of Identity (SOI) for DWM, which restricts use of protein standardized WMP in products where the relevant SOI specifies DWM must be used.

Storage & Shipping

Product should be stored and shipped in a cool, dry environment with temperatures below 80°F and relative humidities below 65%. Shelf life is 6-12 months when stored under recommended conditions.

Packaging

Multiwall kraft bags with polyethylene inner liner or other suitable closed container – i.e., “tote bins,” etc.

Reference: Codex Alimentarius Standard 207-1999