



Beta-lactoglobulin Standard

Product Definition

Bovine Beta-lactoglobulin is a protein isolated from milk or fresh dairy whey. A combination of different protein isolation technologies may be utilized for purification of the protein. The acidity of Beta-lactoglobulin may be adjusted by the addition of safe and suitable pH adjusting ingredients. Beta-lactoglobulin for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Composition

| Classifications | Protein (dry basis) | Beta- lactoglobulin | Fat | Ash | Lactose | Total Moisture |
|-------------------------------|-------------------------------------|--------------------------------|--------------------------------------|------------------------|---------------------------|------------------------------------|
| Beta- lactoglobulin WPI | Min. 89.5% Typical: 90% - 92% | Min. 70% (% of protein) | Max. 1.5% Typical: 0.5% - 1.0% | Typical 2.0% - 3.5% | Typical 0.5% - 1.0% | Max. 6% Typical: 4.0% - 5.0% |
| Beta- lactoglobulin WPC | Min. 33.5% Typical: 34% & 80% | Min. 60% (% of protein) | Max. 10% | Max. 10% | Max. 60% | Max. 6% Typical: 4.0% - 5.0% |

Other Characteristics

| | |
|---------------------------|----------------------|
| Scorched Particle Content | ≤ 15.0 mg/25 gm |
| pH | 2.5 – 7.5 |
| Color | white to light cream |
| Flavor | bland, clean |

Microbiological Analysis

| | |
|----------------------|----------------|
| Standard Plate Count | ≤ 30,000 cfu/g |
| Coliform | ≤ 10 cfu/g |
| Salmonella | negative |
| Yeast & Mold | ≤ 100 cfu/g |

Methods of Analysis

| Criteria | Reference Method |
|--------------------|---|
| Protein | Kjeldahl method: AOAC 991.20 (N x 6.38) |
| Fat | Mojonnier: AOAC 989.05 |
| Ash | Oven at 550C: AOAC 942.05 |
| Lactose | ISO 22662/IDF 198 |
| Total Moisture | Vacuum oven: AOAC 925.45 |
| Beta-lactoglobulin | HPLC |

Product Labeling

It is recommended that product be identified on the label as: “Beta-lactoglobulin”, “Whey Protein Concentrate” Or “Whey Protein Isolate”

Product Applications and Functionality

High protein beverages, puddings, yogurt, ice-cream, frozen yogurt, beverages, salad dressings, process cheese, gels and protein bars.

Storage & Shipping

Product should be stored and shipped in a cool, dry environment with temperatures below 80°F and relative humidities below 65%. Stocks should be rotated and utilized within 2 yrs.

Packaging

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