

# Alpha-lactalbumin Standard

## Product Definition

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

## Composition

Classifications	Protein % (dry basis)	Alpha- Lactalbumin %	Fat %	Ash %	Lactose %	Total Moisture %
<b>Alpha-lactalbumin WPI</b>	Min. 89.5% Typical: 90% - 92%	Min. 28% (% of protein)	Max. 1.5% Typical: 0.5% - 1.0%	Typical: 2.0% - 3.5%	Typical: 0.5% - 1.0%	Max. 6.0% Typical: 4.0% - 5.0%
<b>Alpha-lactalbumin WPC</b>	Min. 33.5% Typical: 34% & 80%	Min. 28% (% of protein)	Max. 10%	Max. 10%	Max. 60%	Max. 6.0% Typical: 4.0% - 5.0%

## Other Characteristics

Scorched Particle Content ≤ 15.0 mg/25 gm  
pH 2.5 - 7.5  
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
Alpha-lactalbumin	HPLC

## **Product Labeling:**

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

## **Product Applications and Functionality**

Infant formula, high protein beverages, 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 relative humidities below 65%. Stocks should be rotated and utilized within 2 years.

## **Packaging**

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