

# Whey Protein Isolate (WPI)

## Production Definition

Whey Protein Isolate is obtained by the removal of sufficient nonprotein constituents from whey so that the finished dry product contains not less than 90% protein. WPI is produced by physical separation techniques such as precipitation, membrane filtration and/or ion exchange. The acidity of WPI may be adjusted by the addition of safe and suitable pH adjusting ingredients. WPI for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

### Typical Compositional Range<sup>1</sup>

	<i>Percentage</i>
Protein.....	92.0
Lactose.....	0.5
Fat.....	1.0
Ash.....	2.0
Moisture.....	4.5

### Microbiological Analysis

Standard Plate Count .....	≤ 30,000/g
Coliform.....	≤ 10/g
Salmonella .....	negative
Listeria .....	negative
Coagulase-positive Staphylococci.....	negative

## Other Characteristics

Scorched Particle Content .....	7.5 – 15.0 mg
Color.....	cream
Flavor .....	bland, clean

## Ingredient Statement

“Whey Protein Isolate ( \_\_\_\_\_ %) protein)”. The present of protein is declared in 2% increments or as actual percentage, provided an analysis of the product is supplied.

## Production Applications and Functionality

General protein supplement, protein functionality for gelation (yogurts, pudding), whipping (topping and filling), water-binding (meat, sausage), and emulsification (ice cream, margarine, mayonnaise)

## 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 9 months to 1 year.

## Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. (*i.e.* “*tote bins,*” *etc*)

<sup>1</sup> On an “as is” basis