


Hilmar™ 9020 Whey Protein Isolate Agglomerated

Hilmar™ 9020 is a whey protein isolate derived from sweet dairy whey and manufactured by a special cross-flow filtration process. It has superior nutritive value and is ideally suited for protein fortification and use in low pH beverages.

FEATURES / BENEFITS

- Clear in Solution
- Excellent Acid Solubility/Stability
- Heat Stable During Pasteurization
- Foam Stability
- High Digestibility
- Superior Protein Source
- Excellent Amino Acid Profile
- Low Glycemic Index
- Low Fat and Lactose
- Non GMO (our products are not manufactured with genetically engineered components)

FOOD SAFETY & CERTIFICATION

- Produced in a GFSI-Certified Facility
- Kosher  and Halal Certified
- EU Compliant

NUTRITIONAL VALUES

| Composition | Typical | Specification | Test Method |
|-----------------------------|---------|---------------|------------------|
| Protein (% dry basis) | 92.7 | 90.0 min | Calculation |
| Protein (% as is) | 88.8 | 86.0 min | AOAC |
| Lactose (%) | 1.5 | | AOAC |
| Fat (%) | 0.6 | 1.5 max | AOAC |
| Moisture (%) | 4.2 | 6.0 max | AOAC |
| Ash (%) | 1.8 | 3.0 max | AOAC |
| pH | 3.4 | 4.5 max | 10% Sol. at 20°C |
| Scorched Particles (mg/25g) | 7.5 | 7.5 | SMEDP |

| Microbiology | Specification | Test Method |
|----------------------------------|---------------|-------------|
| APC (CFU/g) | 10,000 max | AOAC |
| Coliforms (CFU/g) | <10 | AOAC |
| <i>E. Coli</i> (CFU/g) | <10 | AOAC |
| Salmonella (750g) | Negative | AOAC |
| Yeast (CFU/g) | 50 max | AOAC |
| Mold (CFU/g) | 50 max | AOAC |
| Coagulase Positive Staph (CFU/g) | <10 | AOAC |
| Listeria (25g) | Negative | AOAC |

| Other Nutritional Information | Typical |
|--------------------------------|---------|
| Cholesterol (mg/100g) | 5 |
| Total Calories (Kcal/100g) | 370 |
| Biological Value (BV) | 104 |
| PDCAAS | 1 |
| Protein Efficiency Ratio (PER) | 3.2 |
| Net Protein Utilization (NPU) | 92 |
| Protein Digestibility | 95 |

| MINERALS | Typical |
|----------------------|---------|
| Sodium (mg/100g) | 19 |
| Calcium (mg/100g) | 46 |
| Potassium (mg/100g) | 48 |
| Phosphorus (mg/100g) | 241 |
| Magnesium (mg/100g) | 7 |
| Chloride (mg/100g) | 1210 |
| Iron (mg/100g) | 0.3 |



Hilmar™ 9020 Whey Protein Isolate Agglomerated

TYPICAL AMINO ACID PROFILE

Amino acids represented as g/100g of product

| | |
|------------------|------|
| Alanine | 4.9 |
| Arginine | 2.0 |
| Aspartic Acid | 10.1 |
| Cystine/Cysteine | 2.3 |
| Glutamic Acid | 16.5 |
| Glycine | 1.5 |
| Histidine | 1.5 |
| Hydroxyproline | <0.1 |
| Isoleucine*□ | 6.4 |
| Leucine*□ | 9.8 |
| Lysine* | 9.3 |
| Methionine* | 2.1 |
| Phenylalanine* | 2.8 |
| Proline | 5.8 |
| Serine | 4.4 |
| Threonine* | 6.6 |
| Tryptophan* | 1.9 |
| Tyrosine | 2.7 |
| Valine*□ | 5.2 |

* Essential Amino Acids □ Branched-Chain Amino Acids (BCAA)

TYPICAL FATTY ACID PROFILE

Fatty acids represented as g/100g of product

| | |
|----------------------------|-------|
| Saturated Fatty Acid | 0.15 |
| Monounsaturated Fatty Acid | 0.05 |
| Polyunsaturated Fatty Acid | 0.10 |
| Trans Fatty Acid | <0.01 |

PHYSICAL CHARACTERISTICS

Hilmar™ 9020 is a spray-dried, cream-colored powder with a bland flavor profile. It is homogeneous, free flowing and non-caking.

PACKAGING

44.09 lb. (20 kg) heat-sealed, bag-in-bag with multi-wall kraft bag outer and polyethylene inner bag liner. Outer kraft bag is recyclable. Twenty-four bags per pallet.

STORAGE / SHELF LIFE

Shelf life is two years from the date of manufacture in its original sealed packaging, through ideal storage conditions, which include temperatures below 25°C, relative humidity lower than 75%, and an odor-free environment. Stocks should be used in rotation, preferably within twelve months.

RECOMMENDED LABEL

Whey Protein Isolate

ORDERING INFORMATION

| PART CODE | SHIPPING POINT |
|-----------|-----------------|
| 200088 | Dalhart, TX USA |

This information is presented for consideration in the belief that it is accurate and reliable, however, no warranty, either expressed or implied, is made and no freedom from liability from patents, trademarks, or other limitations should be inferred. Any data listed are averages only and are not to be considered as guarantees, expressed or implied, nor as a condition of sale.

Hilmar Ingredients is a division of Hilmar Cheese Company, Inc.
Product of USA

We deliver the promise of dairy.™