

## Hilmar™ 8390 Whey Protein Hydrolysate

Hilmar™ 8390 is an 80% whey protein hydrolysate designed for nutritional supplements, sports nutrition applications and medical nutritionals. It is derived from fresh, sweet dairy whey processed by a special cross-flow filtration process. The concentrate is then enzymatically hydrolyzed to produce a mixture of peptides and free amino acids for enhanced nutritional and functional benefits.

### FEATURES / BENEFITS

- High Digestibility
- Heat Stable
- Highly Soluble
- Minimal Carbohydrate Levels
- Low Glycemic Index
- High Acid Solubility/Stability
- Superior Protein Source
- Excellent Amino Acid Profile
- Low Mineral Content
- GMO Free
- Kosher  and Halal Approved
- EU Approved

### APPLICATIONS

- Acid Beverages
- Protein Bars
- Nutritional Fortification
- Medical Nutrition

### NUTRITIONAL VALUES

Composition	Typical	Specification
Protein (% dry basis)	78.0	74.0 min
Protein (% as is)	75.0	71.5 min
Lactose (%)	3.0	6.5 max
Fat (%)	5.5	7.0 max
Moisture (%)	3.5	5.5 max
Ash (%)	4.5	6.0 max

Microbiology	Typical	Specification
SPC (cfu/g)	<1,000	10,000 max
Coliforms (MPN/g)	<3	<10 max
<i>E. Coli</i> (MPN/g)	<3	<3 max
Salmonella (25g)	Negative	Negative
Yeast (cfu/g)	<10	50 max
Mold (cfu/g)	<10	50 max

Other Nutritional Information	Typical
Cholesterol (mg/100g)	204
Total Calories (Kcal/100g)	386
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)	1,000
Calcium (mg/100g)	500
Potassium (mg/100g)	580
Phosphorus (mg/100g)	330
Magnesium (mg/100g)	60
Chloride (mg/100g)	170
Iron (mg/100g)	1



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## TYPICAL AMINO ACID PROFILE

Amino acids represented as g/100g of product

Alanine	3.6
Arginine	2.5
Aspartic Acid	8.6
Cystine/Cysteine	1.7
Glutamic Acid	13.4
Glycine	1.5
Histidine	1.5
Hydroxyproline	<0.1
Isoleucine*□	4.8
Leucine*□	9.0
Lysine*	7.2
Methionine*	1.7
Phenylalanine*	2.6
Proline	5.7
Serine	4.8
Threonine*	5.0
Tryptophan*	1.3
Tyrosine	2.8
Valine*□	4.5

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

## TYPICAL FATTY ACID PROFILE

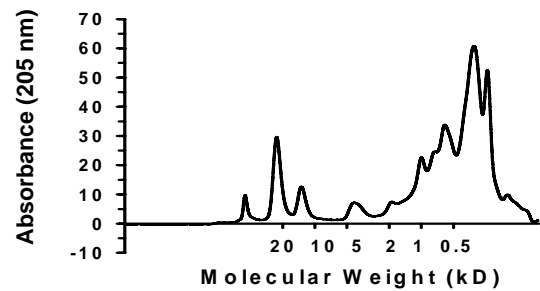
Fatty acids represented as g/100g of product

Saturated Fatty Acid	2.24
Monounsaturated Fatty Acid	1.05
Polyunsaturated Fatty Acid	0.32
Trans Fatty Acid	0.14

## MOLECULAR WEIGHT DISTRIBUTION AND PEPTIDE PROFILE

		Typical
AN/TN		26%
Daltons		%
>20,000		9.5
5,000-20,000		6.6
1,000-5,000		12.9
<1,000		70.8

## PEPTIDE PROFILE



## PHYSICAL CHARACTERISTICS

Hilmar™ 8390 is a spray-dried, cream-colored powder. It is homogeneous, free flowing and non-caking.

## PACKAGING

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

## STORAGE / SHELF LIFE

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

## RECOMMENDED LABEL

Whey Protein Hydrolysate

## ORDERING INFORMATION

PART CODE	FOB
200015	Hilmar, CA USA

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We deliver the promise of dairy.™