

SeaPro[®] 70

Natural Pacific White Fish Meal

SeaPro[®] 70 is a high-protein fish meal derived mainly from fresh cuttings of Pacific whiting (*Merluccius productus*) harvested and processed for human consumption. All processing is domestic and shore-based. All facilities are federally inspected. Commercial fisheries targeting Pacific whiting and other groundfish species on the West Coast of the United States conform to [Marine Stewardship Council](#) standards and reflect our “Sustainability Mission” to promote socially and ecologically responsible marine resource management practices worldwide. Utilizing only fish cuttings from established marine fisheries managed as sustainable natural resources is the best way to ensure our product is wholesome, renewable and consistently available.

SeaPro[®] 70 is a consistent feed ingredient. Product specifications do not vary seasonally and each production lot is formulated and blended to standard nutrient levels. Our ingredient is a concentrated source of highly digestible fish protein and provides supplemental levels omega-3 fatty acids including docosahexaenoic (DHA) and eicosapentaenoic (EPA). It is stabilized with natural antioxidants. This premium product is ideal for improving feed protein quality, reducing dietary ash, and validating flavor, label and natural claims.

SeaPro[®] 70 is produced solely in the United States of America. It is traceable with documentation showing source and disposition of all raw material utilized in production and final product formulation. Our company benefits from vertical integration within a human seafood company, [Pacific Seafood Group](#), through access to their electronic tracking of fish catch, landings and processing, and the subsequent disposition of fresh fish cuttings. Pacific Seafood Group maintains strict quality standards based on scientifically-derived FSMA/HACCP systems at all our locations to ensure that the product you receive is the highest quality.

Customers are always welcome to visit our facilities and review our practices. Our definition of excellence, “*consistently doing your best and always striving to do better*” demonstrates our commitment to providing a traceable, sustainable and wholesome product to our customers and yours.

Guaranteed Analysis

Crude Protein (min)	70.0 %
Crude Fat (min)	7.0 %
Crude Fiber (max)	1.5 %
Ash (max)	12.0 %
Moisture (max)	10.0 %
Calcium (min/max)	3.0 / 5.0 %
Phosphorus (min)	2.0 %
Salt (max)	1.5 %

Freshness

Histamine	50 mg / kg meal
Total Volatile Nitrogen	120 mg N / 100 g meal

Amino Acids	(% meal)
Alanine	3.9
Arginine	5.1
Aspartic acid	6.6
Cystine	0.7
Glutamic acid	9.1
Glycine	3.9
Histidine	1.6
Isoleucine	3.3
Leucine	5.4
Lysine	5.7
Methionine	2.0
Phenylalanine	3.3
Proline	2.9
Serine	3.1
Taurine	0.2
Threonine	2.9
Tryptophan	0.9
Tyrosine	2.8
Valine	3.9

Protein Digestibility

Pepsin Digestibility (0.0002% pepsin) 96.0 %

Fatty Acids		(% meal)	(g / 100 g fat)
Myristic	C 14:0	0.3	3.0
Palmitic	C 16:0	1.8	19.0
Palmitoleic	C 16:1	0.7	7.0
Stearic	C 18:0	0.5	5.0
cis-Oleic	C 18:1 n-9	2.4	25.0
cis-Linoleic	C 18:2 n-6	0.2	1.8
gamma-Linolenic	C 18:3 n-6	N/A	0.4
α-Linolenic	C 18:3 n-3	0.2	1.5
cis-11-Eicosenoic	C 20:1 n-9	0.2	2.5
cis-11,14,17-Eicosatrienoic	C 20:3 n-3	0.2	2.0
Arachidonic	C 20:4 n-6	0.2	1.5
Eicosapentaenoic (EPA)	C 20:5 n-3	1.2	12.3
Erucic	C 22:1 n-9	0.1	1.5
Docosahexaenoic (DHA)	C 22:6 n-3	1.1	12.0
Total omega-3		2.3	28.5
Total omega-6		0.4	2.5

Fat Stability

Preserved with mixed tocopherols 1,000 ppm
 Peroxide Value 10.0 mEq / kg fat

Minerals (% meal)

Calcium 3.8
 Phosphorus 2.1
 Potassium 0.5
 Sodium 0.5
 Sulfur 0.8
 Magnesium 0.18

(mg / kg meal)

Iron 160
 Zinc 100
 Aluminum 40
 Copper 4
 Manganese 10
 Chromium 1
 Vanadium BDL
 Cadmium BDL
 Lead 1
 Cobalt BDL
 Nickel BDL
 Molybdenum BDL

Vitamins (IU / kg meal)

Vitamin A 86,500
 Vitamin D 1,500
 Vitamin E N/A

Microbial Analysis

Aerobic Plate Count 100,000 cfu / g

Product Characteristics

Color Light brown
 Odor Mild fish
 Physical Free-flowing, 100% through 1.9 mm screen
 Density Approximately 25 - 28 lb / ft³
 pH 7.0 – 7.5
 Storage Store in a cool, dry place in original packaging
 Stability 6 months when appropriately stored

**Packaging**

1800 lb bulk bags

AAFCO Ingredient Name

Fish Meal, Fish Protein Concentrate

Certification

Canada Export

Processing Statements

Allergen: This product contains fish and is processed in a facility that processes crustacean shellfish.

This product is not intended for human consumption.

Typical Values

The value for mixed tocopherols is a residual and typical content for the product at the time of shipping.

The value for peroxide is a typical value for the product at the time of shipping.

The values for freshness, amino acids, fatty acids, minerals, vitamins, aerobic plate count, and product characteristics are typical and expected.

Manufacturer

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(DBA BioOregon Protein, Inc.)

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