

## **Pacific Whiting Meal**

Pacific Whiting Meal is derived from the 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 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.

**Pacific Whiting Meal** is a complete fishmeal containing soluble fish components. It is a source of highly digestible fish protein, provides a supplemental level of omega-3 fatty acids including docosahexaenoic (DHA) and eicosapentaenoic (EPA), and is stabilized with synthetic antioxidants.

**Pacific Whiting Meal** is produced solely in the United States of America. It is traceable with documentation showing source and disposition of raw material utilized in production and final product formulation. Our company benefits from vertical integration within a human seafood company, <a href="Pacific Seafood Group">Pacific Seafood Group</a>, through access to their electronic tracking of fish catch, landings and processing, and the subsequent disposition of fresh 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 <u>always</u> 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)	63.0 %
Crude Fat (min)	6.5 %
Crude Fiber (max)	1.5 %
Ash (max)	23.0 %
Moisture (max)	10.0 %
Calcium (min/max)	4.5 / 7.5 %
Phosphorus (min)	2.7 %
Salt (max)	3.0 %

#### **Typical Analysis**

#### **Freshness**

Histamine < 50 mg / kg meal Total Volatile Nitrogen 110 mg N / 100 g meal



Amino Acids	(% meal)
Alanine	4.0
Arginine	4.5
Aspartic acid	5.3
Cystine	0.5
Glutamic acid	8.0
Glycine	5.4
Histidine	1.4
Isoleucine	2.6
Leucine	4.9
Lysine	5.0
Methionine	1.6
Phenylalanine	2.7
Proline	3.6
Serine	3.0
Threonine	2.0
Tryptophan	0.5
Tyrosine	2.1
Valine	3.2

Protein Digestibility
Pepsin Digestibility (0.0002% pepsin)  $96.0\,\%$ 

Fatty Acids		(% meal)
Myristic	C 14:0	0.2
Palmitic	C 16:0	1.6
Palmitoleic	C 16:1	0.5
Stearic	C 18:0	0.3
cis-Oleic	C 18:1 n-9	1.9
cis-Linoleic	C 18:2 n-6	0.1
gamma-Linolenic	C 18:3 n-6	BDL
α-Linolenic	C 18:3 n-3	0.1
cis-11-Eicosenoic	C 20:1 n-9	0.1
cis-11,14,17-Eicosatrienoic	C 20:3 n-3	0.1
Arachidonic	C 20:4 n-6	0.1
Eicosapentaenoic (EPA)	C 20:5 n-3	0.9
Erucic	C 22:1 n-9	0.1
Docosahexaenoic (DHA)	C 22:6 n-3	0.8
Total omega-3		2.0
Total omega-6		0.2



### **Fat Stability**

Preserved with BHT	150 ppm
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Peroxide Value 10.0 mEq / kg fat

Minerals	(% meal)
Calcium	6.0
Phosphorus	3.5
Potassium	1.0
Sodium	1.1
Sulfur	0.8
Magnesium	0.2

#### (mg / kg meal)

Iron	100
Zinc	85
Aluminum	40
Copper	5
Manganese	13
Chromium	1
Vanadium	BDL
Cadmium	BDL
Lead	BDL
Cobalt	BDL
Nickel	BDL
Molybdenum	BDL

# Vitamins (IU / kg meal) Vitamin A 64,500 Vitamin D 1,100 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 2.5 mm screen

Density Approximately 25 - 28 lb / ft<sup>3</sup>



pH 7.0 - 7.5

Storage Store in a cool, dry place in original packaging

Stability 9 months when appropriately stored

#### **Packaging**

1,500 lb bulk bags

#### **AAFCO Ingredient Name**

Fish Meal

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

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

#### Manufacturer

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