

# Pacific Whiting 68- MSC Natural Pacific Whiting Meal

**Pacific Whiting 68- MSC** is a natural fish meal certified as sustainable by the <u>Marine Stewardship Council</u> (MSC). It is derived solely 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. Utilizing only fish cuttings from marine fisheries that conform to MSC standards reflects our "Sustainability Mission" to promote ecologically responsible marine resource management practices worldwide. It is the best way to ensure our product is wholesome, renewable and reliably available.

**Pacific Whiting 68- MSC** is a consistent feed ingredient. Specifications do not vary seasonally and each production lot is formulated and blended to standard nutrient levels. 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 natural antioxidants. This fishmeal is species-specific and can validate flavor, label and natural claims.

**Pacific Whiting 68- MSC** 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, <u>Pacific Seafood Group</u>, 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 the product you receive is 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)	68.0 %
Crude Fat (min)	6.5 %
Crude Fiber (max)	1.5 %
Ash (max)	16.5 %
Moisture (max)	10.0 %
Calcium (min/max)	3.8 / 5.8 %
Phosphorus (min)	2.2 %
Salt (max)	2.5 %
Freshness	
Histamine	50 mg / kg meal

# **Protein Digestibility**

Total Volatile Nitrogen

Pepsin	Digestibility	(0.0002%)	pepsin)	96%
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100 mg N / 100 g meal



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Amino Acids	(% meal)
Alanine	3.8
Arginine	5.0
Aspartic acid	6.6
Cystine	0.6
Glutamic acid	9.1
Glycine	3.1
Histidine	1.6
Isoleucine	3.3
Leucine	5.8
Lysine	6.2
Methionine	2.0
Phenylalanine	3.2
Proline	2.5
Serine	2.9
Threonine	3.2
Tryptophan	1.1
Tyrosine	2.8
Valine	4.0

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 Mixed Tocopherols	750 ppm
Peroxide Value	10.0 mEq / kg fat

Minerals	(% meal)
Calcium	4.5
Phosphorus	2.4
Potassium	0.8
Sodium	0.9
Sulfur	0.6
Magnesium	0.2

	(mg / kg meal)
Iron	95
Zinc	80
Aluminum	35
Copper	5
Manganese	12
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 pH Storage Stability	Approximately 25 - 28 lbs / ft <sup>3</sup> 7.0 - 7.5 Store in a cool, dry place in original packaging 9 months when appropriately stored
Packaging	2,000 lb bulk bags
AAFCO Ingredient Name	Fish Meal
Certification	Marine Stewardship Council (MSC-C-54072-WA)

#### **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, and product characteristics are typical and expected values.

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

#### Manufacturer

Pacific Bio Products- Warrenton, LLC DBA BioOregon Protein, Inc. 1935 NW Warrenton Drive Warrenton, OR 97146 w: www.biooregonprotein.com e: biooregonmarketing@pacseafood.com p: 503-861-2256

#### **Technical & Sales Inquiries**

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