



SEA-LAC™ RUMINANT GRADE MENHADEN FISH MEAL

"Sea-Lac" Ruminant Grade by-pass meal differs from conventional commodity fish meal in the quality of the raw material and accompanying processing techniques. "Sea-Lac" is produced from a single species of fish, the Menhaden. The Menhaden are delivered chilled and whole to the processing facility in modern refrigerated vessels where they are immediately processed. Special processing techniques allow OPI to optimize the quality of the meal through temperature, drying conditions, and stabilization at the time of manufacture. The product is therefore of high protein quality, showing enhanced digestibility and ruminal undegradability.

PRODUCT SPECIFICATIONS

PROXIMATE COMPOSITION:

	Typical (as fed)	Range (as fed)	Typical Dry Matter
Crude Protein	63.7	* (min) 61 - 65	69.5
Fat	8.4	8 - 12	9.2
Moisture	8.3	7 - 11	0.0
Ash	19.2	17 - 21	20.9
Digestibility (0.0002%)	90.4	* (min) 90 - 94	
Rumen Undegradability	70.0	* (min) 70 - 80	
NEL (Mcal/LB)	0.7		

* signifies guarantee level

AMINO ACIDS

% OF SAMPLE:

Aspartic Acid	6.0
Threonine	2.8
Serine	2.6
Glutamic Acid	8.5
Proline	3.2
Glycine	4.5
Alanine	4.1
Cystine	0.7
Valine	3.2
Methionine	2.1
Iso-Leucine	2.7
Leucine	4.6
Tyrosine	2.1
Phenylalanine	2.5
Histidine	1.8
Lysine	4.9
Arginine	4.0
Tryptophane	0.6
Taurine	0.4
Hydroxyproline	1.2

MICRO AND MACRO

MINERALS (PPM):

Aluminum	747.9
Barium	17.6
Boron	4.8
Calcium	55347.2
Chromium	4.2
Copper	4.5
Iron	797.9
Magnesium	1985.3
Manganese	46.9
Phosphorus	33036.1
Potassium	6707.4
Selenium	1.9
Sodium	4638.8
Strontium	74.9
Zinc	109.1

VITAMINS, MG/LB.

(LITERATURE VALUES):

Biotin	0.1
Choline	1360.0
Folic Acid	0.1
Niacin	25.0
Pantothenic Acid	4.0
Thiamine (B1)	0.3
Riboflavin (B2)	2.2
Pyridoxine (B6)	2.7
Cyanocobalamin (B12)	0.1
a-Tocopherol (IU/#)	9.5

