

# Raw Material

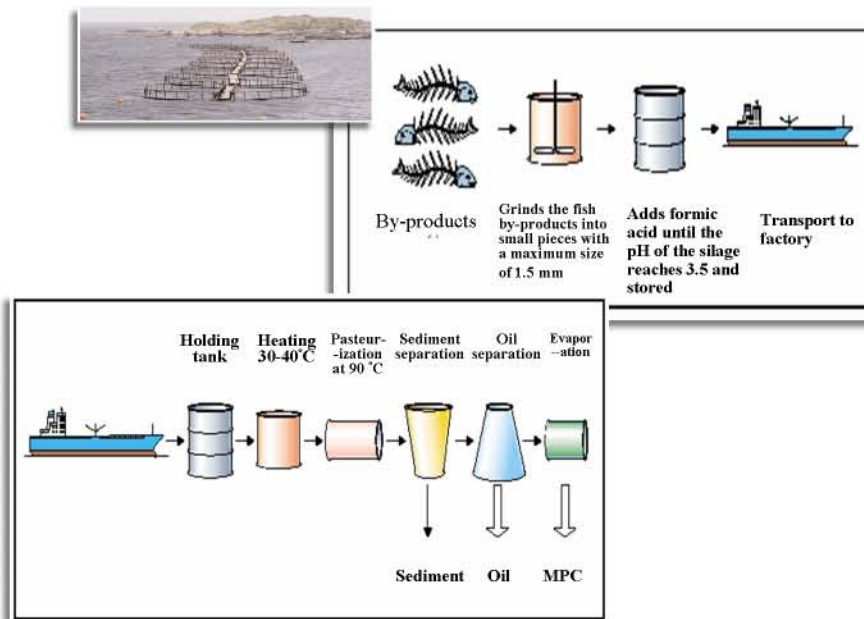
## Product Description

### Marine Protein Concentrate (MPC)

**MPC** is a valuable, liquid form protein source made from fresh salmon by-product which in production was using natural enzymes to decompose into smaller peptides for easy digestion.

#### Features:

1. Produced by the best fresh material.
2. Molecule digested by enzyme for better absorption.
3. Hydrolyzed protein has characteristics of an attractant.
4. MPC is in form of liquid that spread into the water easily
5. 2% formic acid is added in MPC. Formic acid is a promoter and it also preserves the freshness of MPC.
6. 500,000 tons production per year, stable in supply.



## Production

The product is based on salmon silage, i.e. fish by-product and fish viscera minced with 2 % formic acid. By hydrolyzing the fish silage with the natural enzymes of the fish, the proteins are split, thereby increasing the feed value.

### Nice Garden Industrial Co., Ltd.

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## Nutrition Value of MPC

### Chemical Composition

MPC Content		
	Guaranteed analysis	Typical analysis
Crude Protein	min 30%	35%
Crude Fat	max 5%	3%
Crude Ash	max 8%	6%
Dry Matter		45%
pH		3.8 ~ 4.2
Other additives		
Antioxidant:	200~300 ppm	Formic acid: 2 liters per 100 kg

### Typical amino acid profile (%) :

Lysine	2.3	Glycine	1.7
Methionine	1.0	Histidine	0.7
Cysteine	0.4	Alanine	2.8
Arginine	1.5	Proline	1.4
Threonine	1.9	Tyrosine	0.7
Tryptophane	0.2	Valine	1.7
Aspartic acid	2.8	Isoleucine	1.4
Glutamic acid	3.5	Leucine	2.3
Hydroxyproline	0.4	Phenylalanine	1.2
Serine	1.4		

### Typical macrominerals profile (%) :

Calcium	0.9	Sodium	0.8
Phosphorus	0.9	Potassium	0.4
Magnesium	0.1		

## Packaging

Marine protein concentrate can be delivered in the following packaging:

- in bulk by tank trucks
- 1000 liter IBC's measuring 100x120x115 (cm; wxdxh) containing around 1150 kg MPC (returnable or refillable)
- 200 liter drums containing around 230 kg MPC (returnable or refillable)



1150 kg / IBC

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