



Product Description and Specification

PROTEASE BLEND FOR FISH SAUCE ST

Description

Protease Blend for Fish Sauce ST is a blend of proteases formulated to increase the solubilization of protein during the production of fish sauce.

The production of fish sauce involves the fermentation of mixed fish stocks in brine. The fermentation depends on endogenous protease enzymes hydrolysing the fish protein to soluble peptides.

One problem may be the lack of proteases in the fish being used. Another problem is that during the long fermentation the endogenous enzymes may be denatured. This results in less protein solubilization and a reduced protein content.

Specification

Appearance : The product is a white powder of maltodextrin carrier in which the enzyme granules are dispersed.

Solubility : The ingredients in the product are freely soluble in water.

Moisture : The product has a maximum moisture content of 13%.

Heavy Metal Content

Protease Blend for Fish Sauce ST complies with Malaysian Food Laws with respect to heavy metals. Typical analysis is :

Heavy Metal Limits

Lead	Max 0.5 mg/kg
Arsenic	Max 1 mg/kg
Cadmium	Max 1 mg/kg
Mercury	Max 0.05 mg/kg

Microbial Count Protease Blend for Fish Sauce ST complies with FAO/WHO JECFA recommended specifications for food grade enzymes. Maximum limits are as follows:

Total Count	< 5 x 10 ⁴ per gram
Moulds	<10 ² per gram
Coliforms	Absent in 25g
E.coli	Absent in 25g

GMO Status No genetic modification technology is involved in the production of the enzyme component of Protease Blend for Fish Sauce ST.

The carrier used in production of Protease Blend for Fish Sauce ST is food grade non-GMO maltodextrin.

Protease Blend for Fish Sauce ST can therefore be described as a non-GMO product.

Storage Protease Blend for Fish Sauce ST should be stored in a dry place and cool.

Storage in an air-conditioned room is recommended.

The product has an overfill and when stored in an air-conditioned room it has a shelf life of 12 months from production date.

Storage under direct sunlight or in hot rooms or warehouses may result in a shorter shelf life.

Packaging Protease Blend for Fish Sauce ST is available in 10kg plastic-lined carton boxes.

Method of Use Fish sauce production is started as normal with fish being immersed in brine.

After one month of brine fermentation it can be said that the bulk of the endogenous proteases has been denatured.

At this stage (after 1 month of brine fermentation) Protease Blend for Fish Sauce ST is dissolved in a small quantity of water and added with mixing to the fermentation.

The dosage is 1% on total dry weight of the soya sauce mash.

This will increase the protein solubilization and protein content of the soya sauce.