



pearl[®]

FUNCTIONAL INGREDIENTS
FOR SEAFOOD PROCESSING



SCAN FOR
FURTHER
INFORMATION



Blends in Seafood Processing

Phosphate and Non-Phosphate blends are known as MRAs (Moisture Retention Agents) for use in seafood processing industry. Fresh seafood with high nutritional value has a limited shelf life, which can be extended by cold storage. However, the use of MRAs can help in providing improved benefits in seafood processing:

- **Retention of Moisture**

Frozen seafood lose water more rapidly than meat and poultry foods. Treatment with MRAs can help significantly in retention of moisture for long durations of time, thus maintaining the freshness and juiciness of the seafood.

- **Retention of texture and flavour**

Treatment with MRAs can prevent the oxidation and improve the buffering capacity of the meat that would preserve the true flavour and glossy blue white texture of seafood.

- **Preservation of Nutrients**

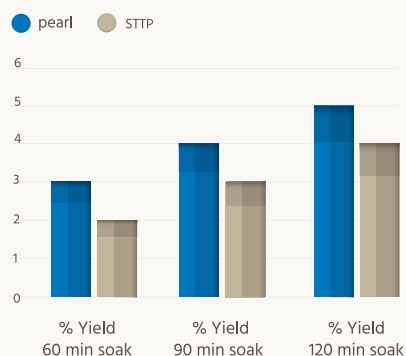
The quick loss of moisture from seafood causes essential nutrients to denature rapidly during cold storage. MRAs can extend the shelf life of seafood, thereby, preserving the essential nutrients present in seafood.



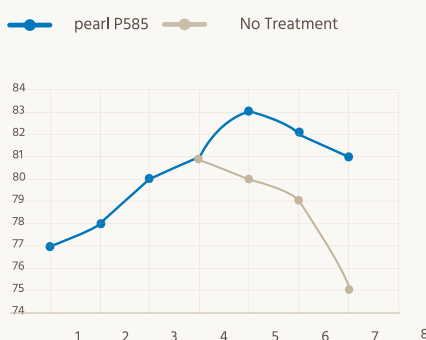
The Advantage

We, at **Aditya Birla Chemicals (Thailand) Ltd.**, have designed the pearl range of phosphates and non-phosphates specifically targeted to fulfil your seafood processing requirements for various applications.

YIELD MANAGEMENT IN H/L VANNAMEI

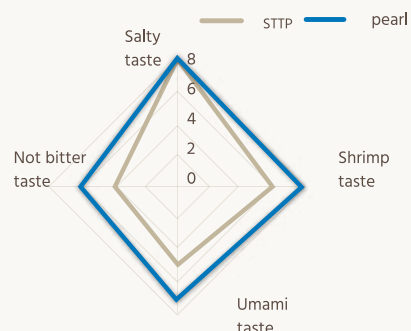


TYPICAL MOISTURE CONTENT IN MEAT OF SHRIMP



IMPROVES ORGANOLEPTIC PERFORMANCE

Sensory taste of shrimp with STPP and pearl



Applications in Seafood Processing

Fish Fillets

Dipping the fish fillets in a 5 -10% solution of pearl P12 produces a surface coating of dissolved proteins which helps retain the natural juices of the fish, and helps lock in the flavour. In addition, the thaw-drip loss of the frozen fillets will be reduced. Firmer bodied species can be treated by injection and tumbling.



Surimi

Surimi is produced by mincing finfish meat and then refined by a number of different washes. Our pearl range of phosphate blends can act as a cryoprotectant to prevent protein denaturation on storage of Surimis.



Application	Product	Category	Key Advantages
Fish Fillet	Pearl P09	Mix Phosphate	Good taste, natural color, non-slimy appearance
	Pearl N80	Non Phosphate	
Alaska Pollock, Cod fish fillets	Pearl P12	Phosphate	High dissolution and yield with good texture
Surimi	Pearl P18	Phosphate Blend	Prevents protein denaturation



Cephalopods

Our pearl range of products now have moisture restoring agents and bleaching agents for treatment of skin on and skinless cephalopods like cuttlefish squid and octopus. These high quality products are specially developed to improve the texturizing effects by increasing water absorption and retention capacity and optimizing industrial handling as well as texture color and quality of raw and cooked cephalopods.

Application	Product	Category	Key Advantages
All forms of Cuttlefish	Pearl C580a	Non Phosphate without E-500	Good texture and shape with Natural appearance
	Pearl C98	Non Phosphate	
Squid tube and Octopus	Pearl C50H	Non Phosphate	Good texture and shape with Natural appearance
Whitening Agent (Liquid & Powder)	Pearl LQ54	Non Phosphate	Liquid whitener, gives excellent white colour, no skin burns
	Pearl CZ621	Non Phosphate	Powdered whitener, gives excellent white colour, no skin burns
Giant Squid	Pearl CG631	Phosphate Blend	Acidity remover and natural taste
Glazing Application (Shrimp/Cephalopod/Fish)	Pearl GL504	Mix Phosphate	Holds the glaze intact, prevents cracks & microbial contamination

Shrimp

Treatment of shrimp with our pearl® range of phosphateblends reduces the thaw-drip loss when frozen. Treatment of POTO, HLSO and butterfly shrimp prior to cooking increases retention of natural juices, and reduces the cook-cool loss. Our pearl® range of products can also help prevent melanosis in HOSO. Good texture and shape, no yellow color in cold storage

Application	Product	Category	Key Advantages
Shrimp (Raw) (H/L, Easy peel, POTO P&D, PD)	Pearl P585 Pearl P01	Phosphate Blend	Natural color & taste, firm texture and consistent higher yields
Shrimps (Cooked) (H/L, CPTO, CPD)	Pearl P898 Pearl P585a	Mix Phosphate Blend	Consistent higher yields with Less cooking loss
Shrimps (Raw)	Pearl LDG	Phosphate	Natural color & taste, firm texture and consistent higher yields
	Pearl N03 Pearl N09	Non Phosphate	
	Pearl N97	Non Phosphate without E-500	Reduce sodium residue; provide natural taste and firm texture
	Pearl P24	Phosphate	
Red Shrimps	Pearl P02	Phosphate Blend	Natural texture and controlled yield
Shrimps (Raw & Cooked)	Pearl M01	Anti-melanosis	Prevents shrimps from black spots
	Pearl EZO	E-number free	Product with Natural ingredient

Scallops

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Application	Product	Category	Key Advantages
Scallop	Pearl N06	Non-Phosphate Blend	Maintains desired moisture, works well for long soaking time maintaining all natural properties
	Pearl SC99	Mix Blend	
	Pearl P01	Phosphate Blend	Gives better yield

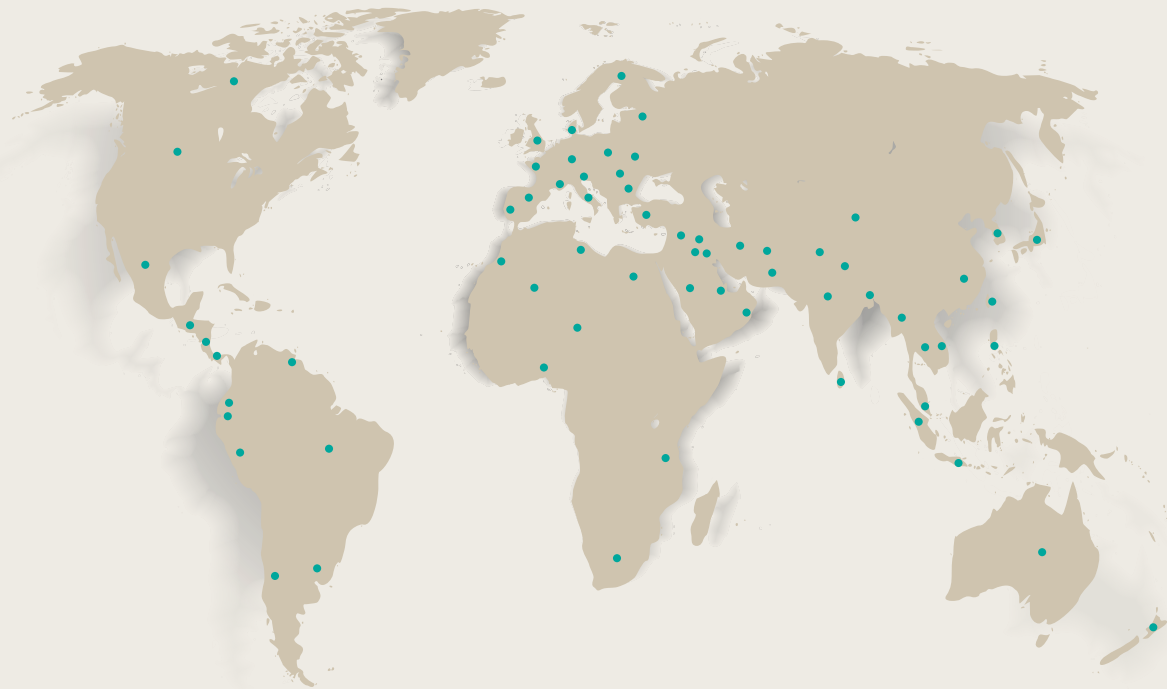


WHERE WE ARE AROUND THE WORLD

Aditya Birla Chemicals (Thailand) Ltd. is part of one of India's most respected industrial houses, **the Aditya Birla Group.**

- US \$60+billions of Revenues
- Fortune 500 company
- Present across 36 Countries
- More than 140,000 Employees worldwide

Aditya Birla Chemicals (Thailand) Ltd. serves customers across the world operating in diverse industries such as food processing, personal consumer products, pulp and paper detergents, water treatment and more.



OUR CUSTOMISED SOLUTIONS FOR FOOD PROCESSING



Phosphates for Cheese



Phosphates for Meat



Phosphates & Non Phosphates for Seafood



Phosphates for Bakery

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