

## CATALOGUE 2024

**MARINE INGREDIENTS SUPPLIER**





# OUR COMPANY

The oceans are fabulous sources of marine bioresources. Covering more than 70% of our planet, they are home to exceptional biodiversity. PhosphoTech Laboratory seeks to identify new molecules of interest from the sea. Understanding their function and cellular mechanisms is the key to develop innovative solutions for health, animal nutrition and new applications in marine biotechnology.

Drawing on 20 years' experience, we offer marine and natural ingredients with a sincere approach of sustainability. As a natural ingredients supplier, our commitment is to develop processes and products that are not only effective, but also safe and respectful.



## BLUE BIOECONOMY

Valorisation of marine by-products



## INNOVATION

Development of health bioactive marine ingredients



## SCIENCE

Scientific research partnerships

# HEALTH MARINE INGREDIENTS



# SUMMARY

PAGE 4      **OUR SPECIALITIES**

PAGE 11      **MARINE POWDERS**

PAGE 15      **ALGAE**

PAGE 19      **MARINE OIL POWDERS**

PAGE 23      **FEED**





# OUR SPECIALITIES

LeciBrain™  
MARINE PHOSPHOLIPIDS

Cognitive health

SulfoBiolin™  
MARINE SULFOLIPIDS

Natural defenses

ChondroFLX™  
JOINT HEALTH

Joint well-being

CollaSea™  
COLLAGEN PEPTIDES

Skin & Joints

OysterCal™  
OYSTER SHELL POWDER

Bone mass

CalciSepia™  
CUTTLEBONE POWDER

Re-mineralization

HEALTH MARINE INGREDIENTS



LeciBrain™ is a natural ingredient resulting from the valorisation of marine by-products. Our innovative process allows us to produce a lipid extract rich in marine phospholipids (60%) and highly esterified in DHA.

LeciBrain™ contributes to good cognitive performances and plays a key role in memory and concentration.



SulfoBiolin™ is a natural ingredient extracted from algae. This ingredient is naturally concentrated in glycolipids and particularly sulfolipids, with a unique and specific structure.

SulfoBiolin™ helps to maintain natural defenses.





ChondroFLX™ is a marine origin formulation with proteins and minerals. It is made up of by-products from the fishing industry.

ChondroFLX™ is an ingredient of choice against the natural aging of joints.



CollaSea™ is a marine collagen obtained by enzymatic hydrolysis derived from wild fish skins. What makes it special: it is neutral and odorless.

CollaSea™ helps to maintain skin beauty and joint health.





OysterCal™ is an oyster shell powder. This ingredient is made from unused oyster shells, a renewable and sustainable material.

OysterCal™ provides calcium for mineralization and maintenance of bone mass.



CalciSepia™ is a cuttlefish bone powder. It is very rich in minerals (calcium). It comes from the valorization of marine by-products

CalciSepia™ helps remineralize bones and strengthen the skeleton.







# MARINE POWDERS

PAGE 5 **CHITOSAN**

**CUTTLEBONE**

**FISH BONE**

PAGE 6 **FISH MILT - MARINE NDA**

**HYDROXYAPATITE**

**MARINE CALCIUM**

PAGE 7 **MARINE CHONDROITIN  
SULFATE 90%**

**MARINE ELASTIN**

**MARINE MAGNESIUM**

PAGE 8 **MUSSEL MEAT**

**OYSTER MEAT (TAURINE)**

**OYSTER SHELL**

PAGE 9 **SHARK CARTILAGE**

**SHARK CHONDROITIN  
SULFATE 90%**

**SKATE CARTILAGE**

PAGE 10 **TYPE I MARINE COLLAGEN**

**TYPE II MARINE COLLAGEN**



# CHITOSAN

 ENERGY  HEART

**Description:** This powder is obtained from snow crabs' shells (*Chionoecetes opilio*).

**Geographic origin:** Alaska 

**Appearance:** fine powder of white to beige color, with characteristic odor

**Composition:** Chitosan  $\geq 90\%$

**PACKAGING:** 25 kg drum



# CUTTLEBONE

**Description:** CalciSepia™ is a powder rich in calcium carbonate produced from processing cuttlefish co-products (*Cuttlefish pharaonis*).

**Appearance:** fine powder of white to grey color, with characteristic odor

**Composition:** Calcium 36%


**PACKAGING:** 25 kg bag

 BONE



# FISH BONE

**Description:** This powder is obtained from white fish bones.

**Geographic origin:** North East Atlantic (FAO27) 

**Appearance:** fine powder of white to grey color, with characteristic odor

**Composition:** Calcium  $> 21\%$  – Phosphorus  $> 10\%$

**PACKAGING:** 25 kg drum

 BONE



# FISH MILT – MARINE DNA



SKIN



BRAIN

**Description:** This powder is obtained from wild cod milt (*Gadus morhua*).

**Geographic origin:** Atlantic (FAO27) 

**Appearance:** fine white brown to orange powder with a characteristic odor

**Composition:** Proteins  $\geq 77,5\%$  – Fats 11,1%

**PACKAGING:** 25 kg bag



# HYDROXYAPATITE

**Description:** This powder is obtained by hydrolysis then dehydration and grinding of sardine scales (*Sardina pichardus*).

**Geographic origin:** Normandy and Brittany coasts

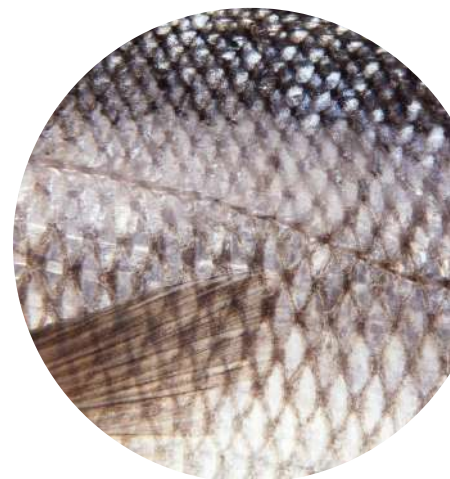
**Appearance:** fine powder of white color, with characteristic odor

**Composition:** Hydroxyapatite  $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$  55% – Calcium 20% – Phosphorus 10%

**PACKAGING:** 25 kg drum



BONE



# MARINE CALCIUM

**Description:** This powder is obtained from the algae Lithothamnium (*Lithothamnium calcareum*).

**Geographic origin:** Icelandic coast 

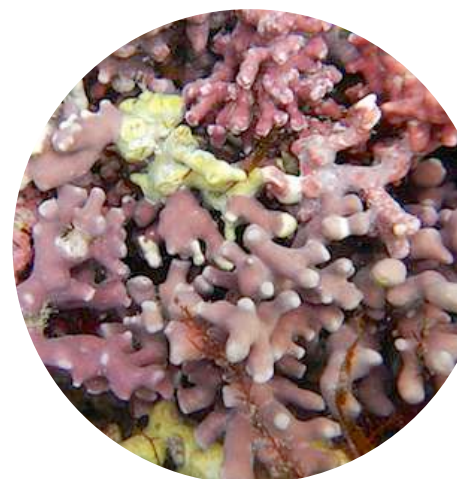
**Appearance:** fine grey powder with characteristic odor

**Composition:** Calcium 30-35% – Magnesium 2-4%

**PACKAGING:** 25 kg bag



BONE



# MARINE CHONDROITIN SULFATE 90%

 JOINT HEALTH

**Description:** This powder is obtained from fish bones, mainly *Gadus macrocephalus*.

**Appearance:** fine powder of white to beige color, with characteristic odor

**Composition:** Chondroitin sulfate  $\geq 90\%$

**PACKAGING:** 25 kg bag



# MARINE ELASTIN

 SKIN

**Description:** This powder is obtained by enzymatic hydrolysis of wild fish skins. The peptides obtained have a molecular weight of 1400 Da, which makes the powder soluble in aqueous phase and fully digestible.

**Appearance:** fine, off-white powder with a characteristic odour

**Composition:** Proteins  $> 75\%$

**PACKAGING:** 20 kg bag



# MARINE MAGNESIUM

 ENERGY

**Description:** Marine magnesium oxide powder is extracted from sea water purification. The gentle, solvent-free process reduces the sodium and chloride content.

**Appearance:** fine white to beige powder with a characteristic odor

**Composition:** Magnesium  $> 55\%$

**PACKAGING:** 25 kg bag





# MUSSEL MEAT

 **JOINT HEALTH**

**Description:** This powder is obtained from mussels (*Perna canaliculus*).

**Geographic origin:** New Zealand 

**Appearance:** fine powder of light brown to olive green color, with characteristic odor

**Composition:** Proteins > 30%

**PACKAGING:** 25 kg bag



# OYSTER MEAT (TAURINE)

 **ENERGY**  **HEART**

**Description:** This powder is obtained from oysters (*Crassostrea gigas*).

**Geographic origin:** South Korea 

**Appearance:** fine powder of beige color, with characteristic odor

**Composition:** Taurine ≥ 3% – Proteins > 35%

**PACKAGING:** 25 kg bag



# OYSTER SHELL

 **BONE**

**Description:** The oyster shell powder is produced from oyster shells *Crassostrea gigas*.

**Geographic origin:** Atlantic and Brittany coasts 

**Appearance:** fine powder of grey color, with characteristic odor

**Composition:** Calcium 35%

**PACKAGING:** 25 kg bag



# SHARK CARTILAGE

 JOINT HEALTH

**Description:** This powder is obtained from dogfish (*Scyliorhinus canicula*) skeletons.

**Geographic origin:** Normandy and Brittany coasts

**Appearance:** fine powder of white color, with characteristic odor

**Composition:** Collagenous proteins  $\geq 20\%$  - Chondroitin sulfate 4%  
- Glycosaminoglycans 5% - Glucosamin sulfate 2,5% - Calcium  $\geq 20\%$  - Phosphorus  $\geq 10\%$

**PACKAGING:** 25 kg drum



# SHARK CHONDROITIN SULFATE 90%

 JOINT HEALTH

**Description:** This powder is obtained from shark (*Carcharhinus Latistomus*) fish bones.

**Appearance:** fine powder of white to beige color, with characteristic odor

**Composition:** Chondroitin sulfate  $\geq 90\%$  - Proteins  $\leq 6\%$

**PACKAGING:** 25 kg bag



# SKATE CARTILAGE

 JOINT HEALTH

**Description:** This powder is obtained by dehydrating and then grinding ray skeletons (*Raja spp*).

**Geographic origin:** Normandy and Brittany coasts

**Appearance:** fine powder of white color, with characteristic odor

**Composition:** Collagenous proteins  $\geq 40\%$  - Chondroitin sulfate 15%  
- Glycosaminoglycans 20% - Glucosamin sulfate 9% - Calcium  $\geq 10\%$   
- Phosphorus  $\geq 6\%$

**PACKAGING:** 25 kg drum



# TYPE I MARINE COLLAGEN



JOINT HEALTH



SKIN

**Description:** This powder is obtained by enzymatic hydrolysis of MSC-certified wild fish' skins (*Gadus morhua*, *Theragra chalcogramma*, *Pollachius virens*, *Melanogrammus aeglefinus*, *Pleuronectes platessa*). The peptides obtained have a molecular weight of 2000 Da.

**Appearance:** fine white to pale yellow powder neutral and odorless

**Composition:** Proteins  $\geq 90\%$

**PACKAGING:** 15 kg bag



# TYPE II MARINE COLLAGEN

**Description:** This powder is obtained by dehydrating and then grinding ray skeletons (*Raja spp*).

**Geographic origin:** Normandy and Brittany coasts

**Appearance:** fine powder of white color, with characteristic odor

**Composition:** Collagenous proteins  $\geq 40\%$  - Chondroitin sulfate 15% - Glycosaminoglycans 20% - Glucosamin sulfate 9% - Calcium  $\geq 10\%$  - Phosphorus  $\geq 6\%$

**PACKAGING:** 25 kg bag



JOINT HEALTH





# ALGAE



PAGE 16 **ALGAE POWDERS**

**ASCOPHYLLUM**

**CHLORELLA**

PAGE 17 **LITHOTHAMNIUM**

**SPIRULINA**

PAGE 18 **ALGAE FLAKE FORM**

**BLADDERWRACK**

**DULSE**

**NORI**

PAGE 19 **SEA LETTUCE**

**SEA SPAGHETTI**

**WAKAME**

# ALGAE POWDERS

## ASCOPHYLLUM



**WEIGHT CONTROL**



**GASTROINTESTINAL  
HEALTH**

**Description:** This powder is obtained from brown algae *Ascophyllum* (*Ascophyllum nodosum*).

**Geographic origin:** North Atlantic coast

**Appearance:** fine pale green powder with characteristic odor

**Composition:** Minerals matters 14-25%, vitamin K1

**PACKAGING: 25 kg bag**



## CHLORELLA



**ENERGY**



**DETOX**

**Description:** This powder is obtained from microalgae *Chlorella* (*Chlorella vulgaris*).

**Appearance:** fine dark green powder with characteristic odor

**Composition:** Proteins 45-55% - Minerals matters 6-9%, manganese, iron, chromium, vitamins A, K1, B9, B12

**PACKAGING: 25 kg bag**



# LITHOTHAMNIUM

 **BONE**

**Description:** This powder is obtained from algae Lithothamnium (*Lithothamnium calcareum*).

**Geographic origin:** Icelandic coast

**Appearance:** fine grey powder with characteristic odor

**Composition:** Calcium 30-35% - Magnesium 2-4%

**PACKAGING: 25 kg bag**



# SPIRULINA

 **VITALITY**  **ENERGY**

**Description:** This powder is obtained from microalgae Spiruline (*Spirulina platensis*).

**Appearance:** fine dark green powder with characteristic odor

**Composition:** Proteins 50-65% - Phycocyanine 10-12%, iron, chromium, vitamins K1, B1, B12

**PACKAGING: 25 kg bag**





# FLAKE FORM ALGAE

We also offer organic algae in flake form for gastronomy and dietetics. They are grown on Brittany coast.

## BLADDERWRACK



**Description:** Bladderwrack (*Fucus vesiculosus*) is a brown seaweed.

**Geographic origin:** Brittany coast

**Composition:** Proteins, fibers, calcium, magnesium, potassium, iron, zinc, manganese, chromium

**PACKAGING:** 25 kg bag



## DULSE



**Description:** Dulse (*Palmaria palmata*) is a red algae.

**Geographic origin:** Brittany coast

**Composition:** Proteins (17%), fibers, calcium, magnesium, potassium, iron, zinc, manganese, chromium, vitamins B, C, E, K1

**PACKAGING:** 25 kg bag



## NORI



**Description:** Nori (*Porphyra haitanensis*) is a red algae.

**Geographic origin:** Brittany coast

**Composition:** Proteins (31%), fibers, calcium, magnesium, potassium, iron, zinc, chromium, vitamins B, K1

**PACKAGING:** 25 kg bag



## SEA LETTUCE



**Description:** Sea lettuce (*Ulva lactuca*) is a green algae.

**Geographic origin:** Brittany coast

**Composition:** Proteins (16%), fibers, magnesium, potassium, manganese, molybdenum, iron, chromium, vitamins B

**PACKAGING: 25 kg bag**



## SEA SPAGHETTI



**Description:** Sea spaghetti (*Himanthalia elongata*) is a brown algae.

**Geographic origin:** Brittany coast

**Composition:** Proteins, fibers, calcium, magnesium, potassium, iron

**PACKAGING: 25 kg bag**



## WAKAME



**Description:** Wakame (*Undaria pinnatifida*) is a brown algae.

**Geographic origin:** Brittany coast

**Composition:** Proteins, fibers, calcium, magnesium, potassium, manganese, iron, chromium, vitamins B, K1

**PACKAGING: 25 kg bag**



# MARINE OIL POWDERS

PhosphoMega™  
MARINE OIL POWDERS

PhosphoMega™ oil powders are composed of 30% oily active ingredients of marine origin, on an organic plant base.

PAGE 16 **PHOSPHOMEGA 18/12 TG**

**PHOSPHOMEGA 35/25 EE**

PAGE 17 **PHOSPHOMEGA ALGAE  
SCHIZOCHYTRIUM SP.**

**PHOSPHOMEGA KRILL**

PAGE 18 **PHOSPHOMEGA COD  
LIVER**

**PHOSPHOMEGA SHARK  
LIVER**



# PHOSPHOMEGA 18/12 TG



 BRAIN  HEART

**Description:** This powder is obtained from 18/12 TG fish oil by spray drying.

**Odor:** characteristic

**Appearance:** fine white to pale yellow powder

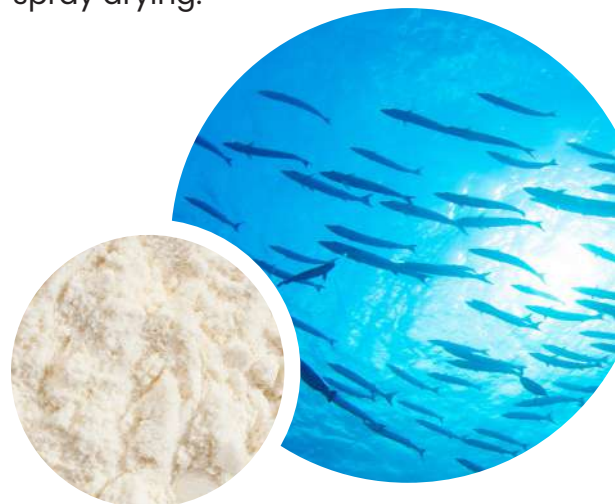
## 18/12 TG OIL

- **Origin of the oil:** sardine (*Sardina pilchardus*), anchovy (*Engraulis ringens*) and mackerel (*Scomber japonicus*).
- **Geographic origin:** Peru  Chili (FAO 87) 

## FATTY ACIDS COMPOSITION (%/total fatty acids)

<b>C20:5 n-3</b> (Eicosapentaenoic acid _ EPA)	<b>18%</b>
<b>C22:6 n-3</b> (Docosahexaenoic acid _ DHA)	<b>12%</b>

**PACKAGING: 10 kg bag**



 BRAIN  HEART



# PHOSPHOMEGA 35/25 EE

**Description:** This powder is obtained from 35/25 EE fish oil by spray drying.

**Odor:** characteristic

**Appearance:** fine white to pale yellow powder

## 35/25 EE OIL

- **Origin of the oil:** anchovy (*Engraulis ringens*) and tuna (*Thunnus thynnus*)
- **Geographic origin:** Peru (anchovy)  Mauritius (tuna) 

## FATTY ACIDS COMPOSITION (%/total fatty acids)

<b>C20:5 n-3</b> (Eicosapentanoic acid _ EPA)	<b>35%</b>
<b>C22:6 n-3</b> (Docosahexanoic acid _ DHA)	<b>25%</b>

**PACKAGING: 10 kg bag**



# PHOSPHOMEGA ALGAE SCHIZOCHYTRIUM SP.



COGNITIVE HEALTH




MEMORY

**Description:** This powder is obtained from the microalgae *Schizochytrium* sp., a rich source of omega 3 docosahexaenoic acid (DHA), by spray drying.

**Odor:** characteristic

**Appearance:** fine white to pale yellow powder

## MICROALGAE SCHIZOCHYTRIUM SP. OIL

- **Origin of the oil:** microalgae *Schizochytrium* sp.
- **Geographic origin:** China 

## FATTY ACIDS COMPOSITION (%/total fatty acids)

C22:6 (Docosahexanoic acid _ DHA)	40%
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**PACKAGING: 25 kg bag**



CARDIOVASCULAR  
HEALTH


# PHOSPHOMEGA KRILL

**Description:** This powder is obtained from Krill oil, rich in marine omega 3 phospholipids, by spray drying.

**Odor:** characteristic

**Appearance:** fine pale orange to red powder

## KRILL OIL

- **Origin of the oil:** Krill (*Euphausia superba*)
- **Geographic origin:** Antarctic 

**PACKAGING: 10 kg bag**



# PHOSPHOMEGA COD LIVER



IMMUNITY



JOINT HEALTH

**Description:** This powder is obtained from cod liver oil by spray drying.

**Odor:** characteristic

**Appearance:** fine white to pale yellow powder

## COD LIVER OIL

- **Origin of the oil:** cod liver (*Gadus morhua*)

- **Geographic origin:** North Atlantic (FAO27) 

## FATTY ACIDS COMPOSITION (%/total fatty acids)

C20:5 n-3 (Eicosapentaenoic acid _ EPA)	7-16%
C22:6 n-3 (Docosahexaenoic acid _ DHA)	6-18%



**PACKAGING: 10 kg bag**



IMMUNITY

# PHOSPHOMEGA SHARK LIVER

**Description:** This powder is obtained from shark liver oil by spray drying.

**Odor:** characteristic

**Appearance:** fine white to pale yellow powder

## SHARK LIVER OIL

- **Origin of the oil:** shark liver (*Squalus blainville*)

- **Geographic origin:** North Atlantic (FAO27) 

- **Composition:** Alkylglycerols 40%

**PACKAGING: 10 kg bag**





# INGREDIENTS AND HEALTH EFFECTS

	Brain	Energy	Bone	Immunity	Joint health	Heart	Skin	Detox	Weight control
OUR SPECIALITIES	LeciBrain™	•							
	SulfoBiolin™			•					
	ChondroFLX™				•				
	CollaSea™				•		•		
	OysterCal™		•						
	CalciSepia™		•						
MARINE POWDERS	Chitosan	•				•			
	Cuttlebone		•						
	Fish bone		•						
	Fish milt	•					•		
	Hydroxyapatite		•						
	Marine calcium		•						
	Marine chondroitine sulf.				•				
	Marine elastine						•		
	Marine magnesium	•	•						
	Mussel meat				•				
	Oyster meat		•			•			
	Oyster shell		•						
	Shark cartilage				•				
	Shark chondroitin sulfate				•				
	Skate cartilage				•				
	Type I marine collagen				•		•		
	Type II marine collagen				•				
ALGAE POWDERS	Ascophyllum								•
	Chlorella		•					•	
	Lithothamnium			•					
	Spirulina		•						
PHOSPHOMEGA	18/12 TG	•				•			
	35/25 EE	•				•			
	Algae Schyzochytrium	•							
	Krill					•			
	Cod liver			•	•				
	Shark liver			•					

# FEED

## FISH MEALS

<b>COD MEAL</b>	<b>25 kg bag</b>
<b>SALMON MEAL</b>	<b>25 kg bag</b>
<b>TUNA MEAL</b>	<b>25 kg bag</b>

## MOLLUSC & CRUSTACEAN MEALS

<b>SQUID MEAL</b>	<b>25 kg bag</b>
<b>SHRIMP MEAL</b>	<b>25 kg bag</b>
<b>CRAYFISH MEAL</b>	<b>25 kg bag</b>
<b>KRILL MEAL</b>	<b>25 kg bag</b>

## ALGAE OIL

<b>ALGAE OIL 64% OMEGA 3 (13% EPA – 43% DHA)</b>	<b>25 kg, 190 kg, 450 kg or 950 kg drum</b>
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## FISH OILS

<b>COD LIVER OIL</b>	<b>25 kg drum</b>
<b>SHARK LIVER OIL</b>	<b>25 kg drum</b>
<b>FISH OIL (25% EPA + DHA)</b>	<b>25 kg drum</b>
<b>CRUDE FISH OIL</b>	<b>25 kg drum</b>
<b>SALMON OIL</b>	<b>25 kg drum</b>





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