

PHYTO A, B, C



HOW TO USE PHYTO A, B, C

- Fresh Phytoplankton
- 30 different species
- Perfectly balanced



PHYTO A,B,C



PHYTO A,B,C

Phyto A, B C offers a unique blend of high-quality phytoplankton for marine aquariums. Our product, featuring 30 different species, is designed to enhance longevity and health in marine aquariums.

What is Phytoplankton?

Phytoplankton are microalgae, photosynthetic organisms that form the foundation of the food webs in marine and freshwater environments, playing a crucial role in the global carbon cycle. They serve as a fundamental food source for many marine organisms, providing essential

nutrients that promote the well-being of fish and other aquatic life.

Phytoplankton are rich in proteins, fatty acids, pigments, vitamins, and minerals necessary for the growth and development of marine life.



BENEFITS OF FEEDING WITH PHYTO A, B C FOR MY AQUARIUM

1. NUTRITIONAL BENEFITS:

Algae serve as a perfect food source for various filter-feeding invertebrates, such as corals, clams, dust fish, scallops, tunicates, sponges, copepods, tube worms, sea squirts, and other marine life in aquariums. Regular supplementation with phytoplankton promotes the health, coloration, growth, and polyp expansion of corals and strengthens zooplankton populations.

2. MAINTAINING WATER QUALITY:

Phytoplankton play a crucial role in maintaining water quality by consuming nitrogenous waste through photosynthesis. Live phytoplankton can help reduce nitrate (NO₃) and phosphate (PO₄) levels in aquariums by absorbing these nutrients. Additionally, phytoplankton can help balance pH levels by increasing dissolved oxygen in the aquarium.

3. CONTROLLING NUISANCE ALGAE:

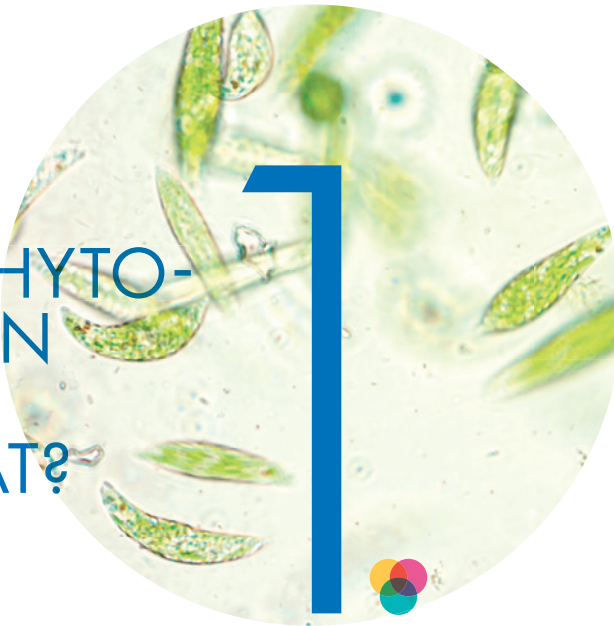
Targeted dosing of live phytoplankton in aquariums can effectively inhibit or even prevent the growth of unwanted algae species such as hair algae, Bryopsis, and toxic cyanobacteria. Since nuisance algae consume similar nutrients as live phytoplankton, regular addition of phytoplankton can deprive these algae of their food source, gradually displacing them and reducing their presence.

4. ECOSYSTEM BALANCE:

In natural ecosystems, phytoplankton play a vital role in the food web as the foundational element of the ecosystem.



WHICH PHYTO- PLANKTON IS GOOD FOR WHAT?



CYANOBACTERIA:

NODULARIA HARVEYANA

The inclusion of *Nodularia harveyana* in marine aquariums can provide numerous benefits, particularly due to its nutrient-fixing ability. Certain cyanobacteria, such as the non-toxic *Nodularia harveyana*, are known for converting atmospheric nitrogen into a form usable by other organisms. This capability helps stabilize water quality, promotes overall marine health, and supports the ecological balance in the aquarium.

SYNECHOCOCCUS SP.

Introducing *Synechococcus* sp. to marine aquariums can offer various benefits, including nutrient fixation, promoting ecological balance, and improving water quality. These positive effects significantly contribute to the health and well-being of the aquatic organisms in the aquarium.



WHICH PHYTO-
PLANKTON
IS GOOD
FOR WHAT?



DIATOMS:

ODONTELLA AURITA

By including *Odontella aurita* in marine aquariums, aquarists can provide marine organisms with a natural source of essential nutrients that promote general health and potentially contribute to the well-being of aquatic life in the aquarium environment (e.g., polyunsaturated fatty acids, pigments, phytosterols).

SKELETONEMA GRETHAE

This diatom is often used in shellfish cultivation and provides important nutrients for marine organisms in the aquarium. *Skeletonema grethae* stores golden fats (DHA/EPA) in its tissue, making it a nutritious food source for marine organisms. It can grow in both marine and freshwater, making it versatile for various aquatic habitats.

CONTICRIBRA WEISSFLOGII

Introducing *Conticribra weissflogii* into a marine aquarium can provide essential nutrients, enhance coloration, improve water quality, promote marine organism growth, and contribute to the overall health and balance of the aquatic environment. Its diverse benefits make it a valuable addition to aquarium ecosystems supporting thriving marine life.



WHICH PHYTO-
PLANKTON
IS GOOD
FOR WHAT?



HAPTOPHYTES:

ISOCHRYISIS GALBANA

Isochrysis galbana is a motile algae with a high DHA (Docosahexaenoic Acid) content, playing a crucial role in nervous system development. It can form longer chains, making it accessible to various filter feeders, including corals.

TISOCHRYISIS LUTEA

Tisochrysis is rich in compounds such as lipids, proteins, carbohydrates, chlorophyll, and carotenoids, including fucoxanthin. These nutrients provide essential elements for marine organisms in the aquarium, supporting their health and vitality.

PAVLOVA SP.

Pavlova sp. can provide Omega-3 fatty acids, antioxidants, prebiotic fibers, anti-inflammatory properties, and nutrient-rich food for marine organisms. This microalgae contributes to maintaining a healthy and balanced ecosystem in the aquarium environment, promoting the well-being of aquarium inhabitants.



WHICH PHYTO-
PLANKTON
IS GOOD
FOR WHAT?



OCHROPHYTES:

NANNOCHLOROPSIS OCULATA

This phytoplankton species is rich in color-enhancing nutritional pigments like astaxanthin, canthaxanthin, and zeaxanthin. By improving the coloration of various aquarium species, *Nannochloropsis oculata* enhances the visual appeal of marine organisms in the aquarium. It is a valuable source of essential fatty acids and proteins, making it highly nutritious for marine organisms. Due to its small size and high palatability, it is easily consumed by phytoplanktivorous animals and provides important nutrients for their growth and well-being. *Nannochloropsis oculata* has been observed to strengthen the immune competence of other organisms, benefiting corals and other marine life in the aquarium. *Nannochloropsis oculata* is the primary food source for countless zooplankton species, contributing to a balanced and diverse food web in the aquarium.

NANNOCHLOROPSIS OCEANICA

Color enhancement: *Nannochloropsis oceanica* is rich in color-enhancing nutritional pigments like astaxanthin, canthaxanthin, and zeaxanthin, and can enhance the coloration of various aquarium species, improving the aquarium's visual appeal. Incorporating *Nannochloropsis oceanica* into a marine aquarium can enhance optical attractiveness, provide essential nutrients, improve water quality, and contribute to the overall health and balance of the aquatic ecosystem.

MICROCHLOROPSIS GADITANA

This microalgae is rich in eicosapentaenoic acid (EPA), an important polyunsaturated fatty acid required for the normal bodily function of marine organisms. *Microchloropsis gaditana* is rich in color-enhancing nutritional pigments like astaxanthin, canthaxanthin, and zeaxanthin, which can enhance the coloration of numerous aquarium species, including corals. Introducing *Microchloropsis gaditana* into a marine aquarium can provide nutrient-rich food, high EPA content, improved coloration, enhanced water quality, and balanced water chemistry.



WHICH PHYTO-
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RHODOPHYTES:

ERYTHROLOBUS COXIAE

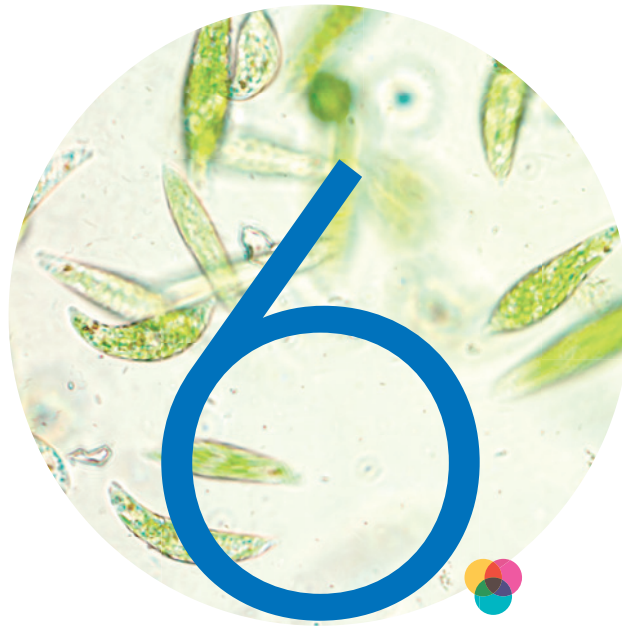
Research suggests that extracts from *Erythrolobus coxiae* exhibit anti-inflammatory properties that can help reduce inflammation and promote the general well-being of marine organisms in the aquarium. The unique composition of *Erythrolobus coxiae*, including fucoxanthin and other compounds, may offer protection against metabolic disorders associated with obesity and other toxins, and protect marine organisms from harmful substances in the aquarium environment.

PORPHYRIDIUM PURPUREUM

Porphyridium purpureum, a red marine microalgae, contains sulfated polysaccharides and antioxidants with anti-inflammatory and antioxidant effects. These properties may help reduce inflammation, neutralize free radicals, slow the aging process, and prevent cell damage in marine organisms in the aquarium. *Porphyridium purpureum* is rich in bioactive substances such as phycoerythrin, extracellular polysaccharides, and polyunsaturated fatty acids. These compounds provide essential nutrients for marine organisms in the aquarium, supporting their growth and overall health. *Porphyridium purpureum* can grow in both saltwater and freshwater. It thrives in saline waters but can also adapt to moist soils and other wet habitats. This adaptability makes it a versatile microalgae for various aquatic environments.



WHICH PHYTO-
PLANKTON
IS GOOD
FOR WHAT?



CHLOROPHYTES:

TETRASELMIS CHUI

Tetraselmis chui offers several benefits to a marine aquarium environment, particularly for corals. Research suggests that Tetraselmis chui has the potential to stimulate the immune system of fish, positively impacting the general health of marine organisms in the aquarium.

DUNALIELLA SALINA

Known for its high antioxidant content, especially carotenoids like beta-carotene, Dunaliella salina is a rich source of essential nutrients such as vitamins, minerals, fats, proteins, carbohydrates, and chlorophyll. It contains Omega-3 and Omega-6 fatty acids, linoleic acid, alpha-linolenic acid, and vitamin E. Dunaliella salina can support the vitality, general well-being, and immune system health of marine organisms. Its nutrient-rich composition contributes to the overall health of fish and other aquarium inhabitants.

CHLORELLA STIGMATOPHORA

Adding Chlorella to a marine aquarium can support nutrient supply, improve water quality, strengthen the immune system of marine organisms, aid in detoxification, and enhance growth performance. This algae species contributes to creating a thriving and balanced ecosystem in the aquarium environment.

CHLOROMONAS AUGUSTAE

Introducing Chloromonas augustae into a marine aquarium can stimulate feeding, provide biologically safe food, offer a high content of essential fatty acids, serve as enrichment for filter feeders, and provide a natural source of carotenoids.



AN OVERVIEW:

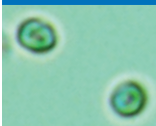
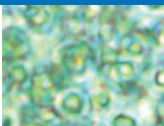

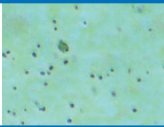
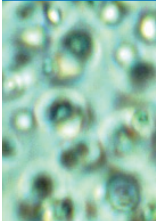
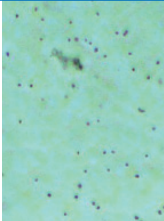
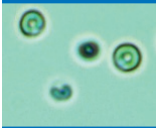
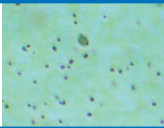


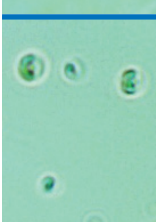
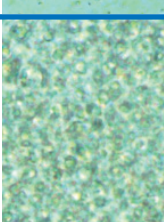
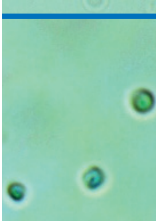
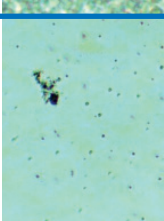
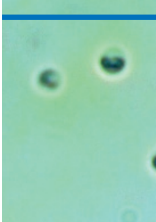
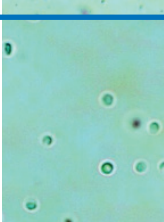
	Phytoplankton	Size
	Tetraselmis chui	10 µm
	Conticribra weissflogii	5 µm
	Thalassiosira pseudonana	10 µm
	Isochrysis galbana	10 µm
	Rhodomanas atrorosea	5 µm
	Rhodomanas atrorosea	10 µm
	Rhodomanas maculata	10 µm
	Rhodomanas baltica	10 µm
	Chloromonas augustae	20 µm
	Chlorella stigmatophora	10 µm
	Chloroidium saccharophilum	10 µm
	Chlorella sp	10 µm
	Chlorocystis dangeardii	20 µm
	Tetraselmis apiculata	10 µm
	Tisochrysis lutea	5 µm
	Tetraselmis chui	10 µm
	Dunaliella salina	10 µm
	Dunaliella primolecta	10 µm
	Porphyridium purpureum	5 µm



PHYTO A,B,C



PHYTO A CONTAINS THE FOLLOWING MICROPLANKTON SPECIES:

	Chlorophylls	Chlorophylls	Carotenoids	Xanthophylls	Other
		Dunaliella salina (main source of β -carotene)			
	α, c		α - β - and γ -Carotene	Lutein Prasinonanthin	Starch (α -1,4-Glucan)
		Nannochloropsis oculata			
	α, c		α - β - and γ -Carotene	Lutein Prasinonanthin	Chrysolaminaran (α -1,4-Glucan)
		Rhodomonas chrysoidea (Phycobillin-cryptomonads, phycocyanin, and phycoerythrin)			
	α, c	Phycoerythrin-545 r-Phycocyanin	α - β - and ϵ -Carotene	Fucoxanthin–yellow Violaxanthin–orange Zeaxanthin – orange Diadinoxanthin – gold-brown Cryptoxanthin	Chrysolaminaran (β -1,3-Glucan)
		Diacronema lutheri (pavlova)			
	α, c		α and β -Carotene	Fucoxanthin–yellow	Chrysolaminaran (β -1,3-Glucan)
		Porphyridium cruentum (main source of various nutrients: Omega3, Omega6 fatty acids; essential amino acids (leucine, isoleucine, valine...); and carotenoids. The strain is very rich in Omega 3, Omega 6, and Beta-Carotene)			
	α	r,b-Phycoerythrin r-Phycocyanin Allophycocyanin	α and β -Carotene	Lutein	Floridean starch (α -1,4-Glucan)
		Rhodomonas salina (Phycobilins – cryptomonad phycocyanin and phycoerythrin)			
	α, c	Phycoerythrin-545 r-Phycocyanin	α - β - and ϵ -Carotene	Fucoxanthin–yellow Violaxanthin–orange Zeaxanthin–orange Diadinoxanthin–gold-brown Cryptoxanthin	Chrysolaminaran (β -1,3-Glucan)
		Rhodomonas atrorosea A (Phycobilins – cryptomonad phycocyanin and phycoerythrin)			
	α, c	Phycoerythrin-545 r-Phycocyanin	α - β - and ϵ -Carotene	Fucoxanthin–yellow Violaxanthin–orange Zeaxanthin – orange Diadinoxanthin–gold-brown Cryptoxanthin	Chrysolaminaran (β -1,3-Glucan)
		Rhodomonas atrorosea B (Phycobilins – cryptomonad phycocyanin and phycoerythrin)			
	α, c	Phycoerythrin-545 r-Phycocyanin	α - β - and ϵ -Carotene	Fucoxanthin–yellow Violaxanthin–orange Zeaxanthin – orange Diadinoxanthin–gold-brown Cryptoxanthin	Chrysolaminaran (β -1,3-Glucan)



PHYTO A,B,C



PHYTO B

CONTAINS THE FOLLOWING MICROPLANKTON SPECIES:



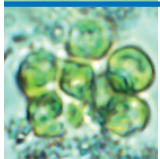
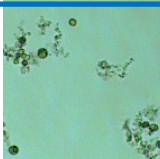

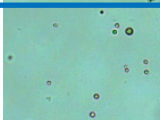
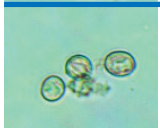


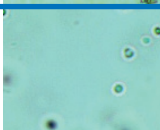
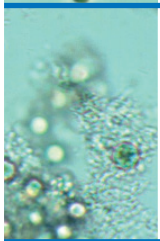
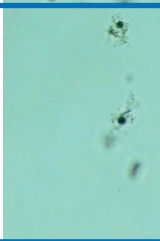
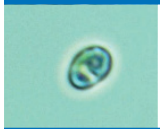
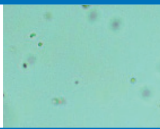
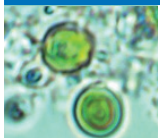
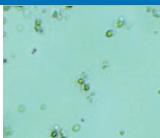
		Chlorophylls	Chlorophylls	Carotenoids	Xanthophylls	Other
		Tetraselmis apiculata Rich in fats: Omega 3, EPA, and ARA • High in Vitamin E • strong antioxidant • Omega-3 fatty acids • high nutritional value, and cell-renewing effect. Benefits: prevents diseases and/or has a supportive effect during/after treatment of diseases • anti-inflammatory, disinfecting properties • strengthens the immune system of aquarium inhabitants • revitalizing effect • promotes the natural reproduction of important zooplankton • improves water quality - an important source of α -carotene				
		α, c		α - β - and γ -Carotene	Lutein Prasincoxanthin	Starch (α -1,4-Glucan)
		Tetraselmis chui Rich in fats: Omega 3, EPA, and ARA • High in Vitamin E • strong antioxidant • Omega-3 fatty acids • high nutritional value, and cell-renewing effect. Benefits: prevents diseases and/or has a supportive effect during/after treatment of diseases • anti-inflammatory, disinfecting properties • strengthens the immune system of aquarium inhabitants • revitalizing effect • promotes the natural reproduction of important zooplankton • improves water quality				
		α, c		α - β - and γ -Carotene	Lutein Prasincoxanthin	Chrysolaminaran (α -1,4-Glucan)
		Microchloropsis gaditana				
		α, c		α - β - and γ -Carotene	Fucoxanthin Violaxanthin	Chrysolaminaran (β -1,3-Glucan)
		Nannochloropsis oceanica				
		α, c		α - β - and γ -Carotene	Lutein Prasincoxanthin	Chrysolaminaran (α -1,4-Glucan)
		Rhodomonas maculata				
		α, c	Phycoerythrin-545 r-Phycocyanin	α - β - and ϵ -Carotene	Fucoxanthin–yellow Violaxanthin–orange Zeaxanthin – orange Diadinoxanthin – gold-brown Cryptoxanthin	Chrysolaminaran (β -1,3-Glucan)
		Synechococcus leopoliensis ideal as food for filter feeders such as mussels and tube worms, LPS/SPS corals, sponges, and for enriching zooplankton				
		α	c-Phycoerythrin c-Phycocyanin Allophycocyanin Phycoerythrocyanin	β -Carotene	Myxoxanthin Zeaxanthin	Cyanophycin (Argin- and Asparagin-Polymer) Cyanophycean (α -1,4-Glucan)
		Tisochrysis lutea Rich in fats: Omega 3, EPA, and ARA. High lipid content (DHA & EPA), highly nutritious, highly digestible as it has no real cell walls				
		α, c		α and β -Carotene	Fucoxanthin – yellow	Chrysolaminaran (β -1,3-Glucan)
		Rhodomonas baltica Phycobilins – cryptomonad • phycocyanin and phycoerythrin				
		α, c	Phycoerythrin-545 r-Phycocyanin	α - β - and ϵ -Carotene	Fucoxanthin – yellow Violaxanthin – orange Zeaxanthin – orange Diadinoxanthin – gold-brown Cryptoxanthin	Chrysolaminaran (β -1,3-Glucan)



PHYTO A,B,C



PHYTO C CONTAINS THE FOLLOWING MICROPLANKTON SPECIES:

	Chlorophylls	Chlorophylls	Carotenoids	Xanthophylls	Other
		Chlorella stigmatophora			
	α,c		α-β- and γ-Carotene	Lutein Prasinoxanthin	Starch (α-1,4-Glucan)
		Rhodella violacea			
	α	r,b-Phycoerythrin r-Phycocyanin Allophycocyanin	α and β-Carotene	Lutein	Floridean starch (α-1,4-Glucan)
		Skeletonema grethae			
	α,c		α-β- and γ-Carotene	Fucoxanthin Violaxanthin	Chrysolaminaran (β-1,3-Glucan)
		Chlorocystis dangeardii			
	α,c		α-β- and γ-Carotene	Lutein Prasinoxanthin	Starch (α-1,4-Glucan)
		Chlorella sp.			
	α,c		α-β- and γ-Carotene	Lutein Prasinoxanthin	Starch (α-1,4-Glucan)
		Porphyridium sordidum			
	α,c	Phycoerythrin-545 r-Phycocyanin	α-β- and ε-Carotene	Fucoxanthin–gelb Violaxanthin–orange Zeaxanthin – orange Diadinoxanthin – gold-braun Cryptoxanthin	Chrysolaminaran (β-1,3-Glucan)
		Chloroidium saccharophilum			
	α,c		α-β- and γ-Carotene	Lutein Prasinoxanthin	Starch (α-1,4-Glucan)
		Chlorella ovalis A			
	α,c		α-β- and γ-Carotene	Lutein Prasinoxanthin	Starch (α-1,4-Glucan)



FAQ

Do I need to add all three phyto variants simultaneously? Can I use just one bottle?

We recommend adding all three products for the best effect. The three phytoplankton mixtures are perfectly coordinated.

What happens if I add too much to my aquarium?

It could cause cloudiness in the water, but it is not harmful.

I have sediment in the bottle—has the plankton gone bad?

No, it is normal for plankton to settle. After gently shaking the bottle, it can be dosed again.

Can I mix all three bottles into one container and dose together?

Since the plankton species were selected based on growth rate, we recommend not mixing them together.

Can I add the phytos with a dosing pump?

The plankton should be gently shaken before addition and is therefore not recommended for use with a standard dosing pump.



STORAGE:

- Store refrigerated!
- DO NOT freeze.

SHELF LIFE:

- PHYTO A, B, C is refrigerated and has a shelf life of approximately 6 months.

DOSAGE:

- 1 - 2 ml daily per 100 liters of aquarium volume.
- Gently shake PHYTO A, B, C before adding and pour it directly into a well-circulated area of the aquarium.



ADVICE:

**Here you will find help and support for the product,
as well as tips + tricks for marine aquariums:**

Certified ICP Advisors:

<https://lab.faunamarin.de/de/advisor-list>

Values + Dosage Calculator:

<https://lab.faunamarin.de/de/calc>

Knowledge database for all chemical elements:

<https://www.faunamarin.de/wissensdatenbank/>

Instructions/HTUs:

<https://www.faunamarin.de/support-downloads/>

Facebook group:

<https://www.facebook.com/groups/1490705804549503/>

YouTube Channel:

https://www.youtube.com/@FaunaMarin_Official/videos

Email:

Support@faunamarin.de

GOOD LUCK

FAUNA MARIN GmbH