

Your path to an exceptional aquarium with lots of color and growth.





Instructions for a **simple** and **effective** way to use the **FAUNA MARIN ZEO LIGHT SYSTEM**

In a few steps you can work your way to having a fantastic aquarium with healthy corals and vibrant colors.

Our **ZEO LIGHT SYSTEM** is one of the most widely used systems for high-end SPS aquariums. The exceptional results provided by our system make it the preferred choice of many of the best aquarists from ground the world.

The **ZEO LIGHT SYSTEM** makes it possible to achieve outstanding coral **color**, **health**, **and growth** without the need to dose countless products on a daily basis.

The products that make up this system only need to be dosed twice per week!

With a few, but very effective products you can achieve incredible results.

In combination with our **BALLING LIGHT SYSTEM** and our other products, the **ZEO LIGHT SYSTEM** guarantees a stable saltwater aquarium for years to come. The stability provided by this system also helps avoid the dreaded "**Old Tank Syndrome**".







With the launch of our **FAUNA MARIN ICP LAB** we are now able to **fine-tune our products** even further. In combination with our lab, experience and recent findings, we are able to provide you with products that are **more effective than ever**. In this new "How to Use" guide, new products and dosages have been adapted to accommodate the aforementioned changes.

The result is:

- Significantly more effective products
- Up to 20% lower dosages
- Up to 20% more growth and significantly improved color even under modern LED systems.
- A more effective ZEO LIGHT SYSTEM that is now adapted to today's modern reef keeping methods and equipment choices.

For many years now we have used the Zeo-Light System on our own sales and display aquariums. Our products are developed by us and are **unique** in composition. We only use tried and tested elements which have shown positive results throughout the years. Within these elements are also new trace elements and micronutrients which have not yet been recognized by hobbyists. These elements also include marine biopolymers and enzymes which provide an important basis for the effectiveness of the Zeo-Light System.

Fauna Marin is pioneering the use of these new micronutrients, all of which are already being used in successful products such as **BACTO BALLS** and **LPS GROW AND COLOR**.

All of our products undergo rigorous quality checks and are **controlled by our in-house marine laboratory**, **FAUNA MARIN ICP LAB**. We are constantly developing and improving our products to ensure the outstanding quality you and your reef deserve.











This guide is intentionally made to be as simple as possible. It therefore only covers the products that are absolutely necessary. This guide will not go into detail with the basic principles of maintaining a saltwater aquarium. The instructions that follow are based on the Berlin system, adequate skimming, good water parameters, and adequate lighting.

You can find detailed recommendations on water parameters and filter systems in our website's download area and at the end of this manual.

In order to ensure a perfect start without the addition of unwanted elements and compounds from poor quality salts, we recommend using our PROFESSIONAL SEA SALT and

the original FAUNA MARIN BALLING LIGHT SALTS and TRACE ELEMENTS.

The "Balling" products that have come on the market in recent years have nothing to do with our FAUNA MARIN BALLING PRODUCTS. We recommend using our original FM BALLING LIGHT products because we can then **guarantee the positive effects** without worry of introducing unwanted compounds.

The new ZEO LIGHT SYSTEM is based on a few, but particularly effective products which make marine aquarium care as easy as possible.

For the Zeo-Light System, you need:

- ZEO LIGHT Zeolite mixture for nutrient reduction
- CORAL VITALITY Nutrient control and coral nutrition
- CARB L Activated charcoal during use
- COLOR ELEMENTS Trace Elements for color optimization
- MIN S Nutrient supply and stabilization
- ELEMENTALS K Highly concentrated potassium solution
- CORAL BALANCE Water treatment
- CORAL SPRINT SPS and LPS food (optional)







Zeo Light Saltwater - Zeolite mixture

To prepare the zeolite media, first wash it with tap water or RO water then soak in tap water for 24 hours. Once the 24 hrs has passed, the media is ready to use.

The basic dosage is **1000 grams of Zeolite per 1000 liters** (264 US gal.) of net water volume. Make sure to calculate your net water volume as accurately as possible, taking live rock and sand displacement into account.

Put the Zeo Light (formerly: UltraLith) in a **Zeolite filter** or in our automatic Zeolite filter, "**Zeomatic 2**". The ZM2 filter includes an **automatic cleaning function** that makes the media more effective and easy to maintain.

Replace 75% of the zeolite media every 4 weeks. Flush/clean the media every 1-2 days.

Change the zeolite media only during the days when it is due to be cleaned.

Activated carbon (CARB L) should be replaced 14 days apart from a zeolite media change out.

You are free to use other saltwater-compatible zeolite mixtures. We do however strongly recommend you use products from manufacturers that have proven knowledge in the saltwater area. There are some zeolite media products that are sold for freshwater purposes. Please note that if another product is used, changes in the dosage may be needed.







CORAL VITALITY

Color, power and vitality

CORAL VITALITY is the optimal supply for the important bacterial fauna of corals. Coral tissue is the key to the vitality, growth and health of all stone corals.

With CORAL VITALITY the symbiosis bacteria in the coral tissue are optimally supplied. A healthy coral biome ensures strong growth and color formation, as well as robust health. Corals with a strong coral biome are much more stress resistant and vital than animals with insufficient symbiosis bacteria.

- Activates all natural colors
- Stable colour formation
- Better acclimatization of the corals
- Promotes especially yellow and violet tones

DOSAGE: 1 drop/100 liters (26 US gal.)/daily







CARB L - Activated charcoal during use

Continuous filtration via **CARB L** (high-purity, activated pellet charcoal) is a basic pillar of the Zeo-Light System.

CARB L is used as a "Permanent carbon" and is used for the care of sensitive SPS and LPS coral. CARB L helps **maintain crystal clear water** by removing phenols, protein compounds, dyes, and nettle toxins from the water.

DOSAGE:

250 - 300 grams (approx. 0.5 - 0.6 liters (0,13-0,15 US gal.))/ 1000 liters (264 US gal.) of aquarium water

Place media in a media filter such as FAUNA MARIN MULTIFILTER with no more than 200 lph (52 gph) of flow through the reactor.

400 - 500 grams (approx. 0.8 - 1.0 liters (0,21-0,26 US gal.)) / 1000 liters (264 gal) of aquarium water.

Use with a filter bag or nylon stocking.

Change the media every 3 - 4 weeks.
Always change 14 days apart from a Zeolite media change out.

We recommend the addition of approx. 10 % Ultra Phos mixed directly into the coal.

Prepare the charcoal for use as follows:

1 day before use, pour hot water over it and let it rest in water for 24 hours.

Mix the ULTRA PHOS already before the coal activation.







COLOR ELEMENTS trace elements

COLOR ELEMENTS are a novel mixture of **growth and color-activating trace elements**. These mixtures are based on the latest findings and are **adapted to current sea salt mixtures**.

A particular emphasis is placed on the fact that these elements are based **on factors of modern reef** aquariums such as those that use LED lighting.

The innovative elemental mixture of COLOR ELEMENTS activates and stabilizes important micronutrients which allow for the significant improvement of growth and color development. The special combination of these elements prevent undesirable build-up of excess elements which can lead to unsightly algae or bacteria growth.

COLOR ELEMENTS are suitable for any aquarium system that runs a **Berlin filtration system**. Through the interplay of the elements from all 3 bottles, **almost all colors can be targeted and enhanced**. This set makes it easier to optimally supply corals with missing elements. **Fluorescent colors** for LPS or soft corals are intensified along with improved SPS coloration. Growth-activating substances support the utilization of these elements.







Starting dosage:

When dosing with CORAL VITALITY, we recommend starting with a dosage of 0.5 ml / 100 liters (26 US gal.) / week. Dose every 3 - 4 days in 2-day intervals.

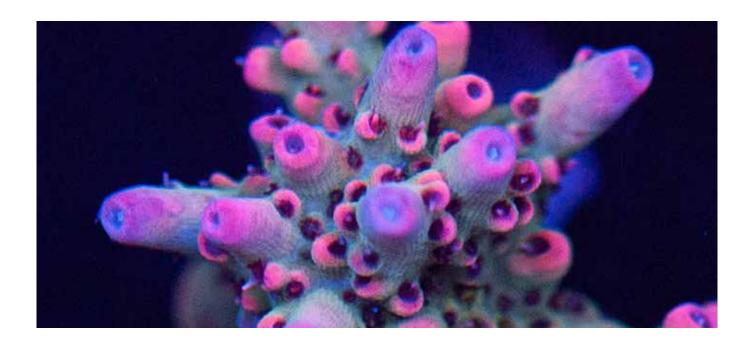
Increase the dosage every month by 0.5 ml until the desired result is reached.

The normal dose is 1 - 2.5 ml / 100 liters (26 US gal.), every 4 days.

The maximum dosage is 3 ml / 100 liters (26 US gal.), every 4 days. This amount should not be exceeded. Dosages via a dosing pump are also possible.

Please note that we do not have any Zooxanthellenised element mixtures! The use of these kind of element mixtures can sometimes be permanently toxic to corals. Our mixtures provide a natural and powerful method for coloring up corals and is compatible for mixed reefs with SPS and LPS coral.

These additives become extremely beneficial and above all, provide improved coral coloration.







CORAL SPRINT - SPS and LPS food

Our new special food for LPS, SPS, and sponges.

CORAL SPRINT is a **supplemental food** for aquariums that are **low in nutrients**; low NO₃, low PO₄, etc. This product is made from a **special mix of volatile proteins** and **bacterial cells**, all of which are a natural food source found in nature's coral reefs.

CORAL SPRINT does not increase nutrients. This product helps provide **strong growth** and **deep**, **strong colors**, **in ultra-low nutrient aquariums**.

The special thing about CORAL SPRINT is its unique composition which **stimulates LPS**, **SPS**, and **Azoo** corals to consume the food from the water column.

Dosage:

1/2 measuring spoon / 500 liters (132 US gal.), every 2 days.

Shake vigorously and pour into a high-flow area of the aquarium.

It does not matter the time of day you dose. With high stocking levels, CORAL SPRINT can also be fed several times per day in small dosages. Be sure not to overdose CORAL SPRINT because coral tissue may slightly darken. If this happens, reduce the dosage by 25%.

CORAL SPRINT becomes even more effective when mixed with a few drops of MIN S per measuring spoon. For this purpose, add 3 drops of MIN S onto a measuring spoon with CORAL SPRINT, wait 2 - 3 minutes, then add the food to the aquarium.

A dark, aromatic smell may be noticed during mixing and after dosing. This is normal and desired.





MIN S – Our best coral food for all corals in reef tanks.

Achieve healthy growth, rich colours and exceptional fluorescence by feeding our liquid feed MIN S to your corals.

- natural food concentrate, made from high quality raw materials
- perfect balance of particles and solids, combined with amino acids
- perfect for nutrient-poor reef systems
- very effective, because highly concentrated
- extreme polyp expansion and growth

Ingredients: Molluscs and crustaceans

Start dosage:

0.25 - 0.5 ml / 500 liters (132 US gal.)

If the aquarium is fully occupied, increase the dose up to 1 ml/500 liters (132 US gal.).

Please pay attention to our HTU MIN S and the corresponding booster mixtures.

Dosage:

1-3 ml / 1000 liters (264 US gal.)
every 2 days dosed directly into the aquarium.
Should there be an overdose,
reduce the dosing quantity by 50 %.
You can recognize an overdosage by a
darkening of the corals or at a
light whitish green glass panel coating.
The minimum dosage is 1-3 drops.







AQUAHOMETEST K – Potassium test for marine aquariums

The FAUNA MARIN potassium test sets new standards for the determination of the potassium content in Seawater aquarium: by titration it delivers with a newly developed method,

in a few steps extremely precise results.

The determination of a correction value increases the accuracy of the results.

Measuring range: 300 - 500 mg/l (0,26 US gal.)

Resolution: 5 mg/l (0,26 US gal.)

Potassium is extremely important for the **growth and colouring of corals**. It also regulates the transport of trace elements into the corals and should therefore not be too low.

Keep the potassium value stable at 390 - 420 mg/liter (0,26 US gal.) and always 20 mg below the calcium value.

Especially with Montipora corals it is easy to see if there is enough potassium in the system. Washed-out greyish colours of montipores and stylophores, lack of fluorescence, lack of growth to dissolution are signs of a lack of potassium. **The potassium value should not fluctuate more than 5 % + -.**

Potassium is therefore very important. Since the potassium consumption is not subject to relative consumption, this has to be balanced individually.

ELEMENTALS K

is a highly concentrated potassium solution for saltwater aquariums for individual compensation of existing potassium deficits. Due to the organic additives it is quickly bioavailable.

Safe and precise correction of potassium deficits to an optimal value.

With ELEMENTALS solutions you get a simple and cost-effective way to dose used elements in reef aquariums.









CORAL BALANCE – Water conditioner

CORAL BALANCE is a modern nutrient regulator and metabolic accelerator. This product was specially developed to reactivate and stabilize the natural nutrient cycle and acid regurgitation of your reef aquarium. In low nutrient systems, CORAL BALANCE accelerates phosphate degradation and stabilization. With the natural effectiveness of active marine biopolymers, great results can be achieved with small dosages.

CORAL BALANCE is a coral food, nutrient carrier, and water conditioner in one.

Due to the unique composition, the product **very quickly and effectively** accelerates the nutrient output through faster coral growth and biological degradation.

After the addition of CORAL BALANCE, the corals form a natural protective film, become **more colorful**, and **gain a natural luster**.

CORAL BALANCE supplies your corals with a combination of **dissolved and particulate food**. As a carrier material, CORAL BALANCE traps and transports nutrients and minerals so that the coral can easily consume it. Through the addition of **natural biopolymers and organic marine raw materials**, the water becomes enriched, acid regulation is improved and more effective.







Dosage:

1 dosing spoon / 200 liters (53 US gal.) of aquarium water, every 4 days.

Mix well with a sample cup of aquarium water and pour directly into a high-flow area.

For aquariums older than 2 years or with PO₄ values above 0.15 mg/l (0,26 US gal.), we recommend dosing 50% of the recommended amount.

When using CORAL BALANCE for the first time, start with 25% of the recommended dose and increase by 25% every month until recommended dose is reached.

1 dosing spoon is equivalent to ½ teaspoon per 100 liters (26 US gal.) of aquarium water. Immediately after dosing, the aquarium water will become cloudy. This cloudiness is harmless and will dissipate within 3 - 5 hours.

Important!

For new aquariums, start CORAL BALANCE **ONLY after the aquarium has been running** for at least **3** months.





AMIN - growth regulator

Corals need **growth regulators** and **organic aids** which they can absorb with their mucous membranes. **AMIN is a mixture of essential and coral own amino acids and enzymes.**They lead to an **extreme polyp formation** and **particularly beautiful colouring** of the corals.

This mixture fits perfectly to **MIN S** and provides the natural coloration of the corals in the **ZEO LIGHT SYSTEM**.

Start with the dosage 4 - 6 weeks after the start of the aquarium with 25 % of the indicated dosage.

AMIN does not darken corals, is **highly effective**, provides **rich colours** and **supports the coral's defences**.







Bacteria

The addition of bacteria is not a basic requirement of the system when using live rock. Although the addition of bacteria mixtures such as our **BACTO BLEND** the results are accelerated, but they are still not necessary for the basic system. When using **BACTO BALLS**, the dosage should not exceed 50 % of the indicated amount shown on product label. They are not necessary for the basic system.









AQUAHOMETESTS: the high-precision seawater tests for the home.

For the simple determination of:

- KALIUM
- CALCIUM + MAGNESIUM
- PHOSPHATE
- KH / ALKALINITY
- NITRITE + NITRATE











Other water values and water tests

We recommend regular water tests through our **FAUNA MARIN ICP LAB**. These laboratory analyses will help you to implement the system and the perfect Setting of all water values. Use our **FAUNA MARIN ICP TEST/ICP TEST TOTAL** where we take you personally by the hand and advise you by our experts.

Recommended water parameters

 Salinity
 34 - 35 psu

 Magnesium
 1250 - 1450

 Calcium
 400 - 440

 Alkalinity/dkH
 6,5 - 7,5

Nitrate 0-5 mg/l (0,26 US gal.) PO₄ 0,01 - 0,05 mg/l (0,26 US gal.) Potassium 400-420 mg/l (0,26 US gal.) **Strontium** 7-9 mg/l (0,26 US gal.) **lodine** 5 0-70 ug /l (0,26 US gal.) **Boron** 6 mg/l (0,26 US gal.)







Dosage instructions – Short version

ZEO LIGHT:

- 1 liter / 1000 (264 US gal.), rinse and soak in tap or RO water before use, clean every 2 3 days
- Replace 75% of the media every 4 6 weeks

CORAL VITALITY:

• 1 drop / 100 liter (26 US gal.) / daily

CARB L:

250 - 300 g / 1000 liters (264 US gal.), in a fluidized reactor with max flow of 200 lph (52 gph)

COLOR ELEMENTS:

- 2 ml / 100 liters (26 US gal.) / 4 days, start dose at 0.5 ml / 100 liters (26 US gal.)
- Dose every 4 days, 2 days apart from Reef Vitality dosages
- Color Elements can be added at the same time
- Depending on the desired color development, each bottle dosage can be adjusted
- Maximum dosage of 3 ml / 100 liters (26 US gal.) / 4 days

CORAL SPRINT:

- 1 measuring spoon (6 ml) / 500 liters (132 US gal.), every 2 days
- Pre-dissolve for low nutrient aquariums

MIN S:

- Coral nutrition and bacteria food
- Dosage of 1 3 drops / 1000 liters (264 US gal.), every 2 days





Dosage instructions – Short version

AMIN:

- 1 ml / 100 liters (26 US gal.) daily
- Due to the special stabilisation of the nutrients contained AMINE is also suitable for dosing pumps.

ELEMENTALS K:

- Dose as needed (determined by Potassium water test result)
- Target Potassium: 440 mg/l (0,26 US gal.)

BACTO BLEND / BACTO BALLS:

 Optional, but especially helpful for aquariums using artificial decoration Dose 50% of the recommended amount shown on product label



Dosing information on the bottles may differ from that in the system description. Individual products complement each other through their combined use.





Other measures leading to success with the ZEO LIGHT SYSTEM:

- 1. 10% weekly water change with PROFESSIONAL SEA SALT
- 2. Use of the BALLING LIGHT SYSTEM
- 3. Partial exchange (2 5%) of the substrate every 14 days
- 4. Use of small decoration pieces.

 We recommend using only ceramics such as Reef System Reef Ceramic.

 In this case, continuous filtering must take place over Phos 0,04
- 5. Mixed lighting from HQI / T5 or LED / T5 or T5 only
- 6. If LED will be used, we recommend LED lamps of the brand Radion G4/G5
- 7. Regular replacement of T5 lamps and HQI lamps at least every 6 8 months
- 8. Observe the dosage quantities and go slow
- 9. Regular water testing with the FAUNA MARIN ICP LAB for analyzing the most important values. Monthly PO₄ depot factor analysis via the Heat Test according to C. Schuhmacher
- 10. Adequate animal husbandry. Include reef fish that naturally help clean the aquarium
- 11. Sufficient coral stocking level for effective nutrient export. A reef aquarium must be filled with coral colonies. Having some small coral frags are not sufficient for nutrient consumption and offer very little competition to the algae and bacteria deposits which feed off of the same food source
- 12. Sufficient flow. At least 20 30x turnover in the display tank with high power flow pumps such as Panta Rhei
- **13. Regular** maintenance of equipment; pump cleaning, etc.





If you want to start a new aquarium with the ZEO LIGHT SYSTEM, simply follow the instructions below:

1. Tag

- Install the aquarium and equipment
- Construct your rock structure(s)
- Add substrate to the aquarium; normal coral sand, grain size 3 mm with 2 - 3cm (0.78" - 1.1") depth
- Add RO/DI water or tap water to aquarium
- Turn on recirculation and circulation pumps
- Check the system for leaks

3. Tag

- Drain water and refill with RO/DI water
- Add sea salt to water; use a salt mix like FAUNA MARIN PROFESSIONAL SEA SALT.
 Adjust the temperature to 25°C (77°F) and mix to a salinity of 34 35
- Install zeolite filters
- Turn on other equipment such as skimmers and reactors

5. Tag

- Continue adding fresh live rock
- Monitor and maintain salinity, alkalinity, and temperature
- Start lighting with 10 hours per day
- Begin adding BACTO BLEND or BACTO BALLS at 50% dosage
- ullet Use a PO $_4$ absorber such as FAUNA MARIN PHOS 0,04 for aquariums using ceramic decoration

7. Tag

- Test water: Calcium, Magnesium, Nitrite, Nitrate, Phosphate
- Nitrite will be detectable at this time

10. Tag

- Test Nitrite value. The value should only be up to 0.1 mg/l
- Start dosing Balling supplements or install lime reactor and adjust Calcium and Alkalinity value
- Install carbon filter with CARB L

11. Tag

- Begin stocking!
- First add hermit crabs, snails, sea urchins.
 Algae eaters such as blennies can be added a few days later
- A few days after adding the algae cleaning crew, you can start adding your first corals
- Increase the stocking level every 7 10 days





How do I switch to the ZEO LIGHT SYSTEM?

Due to the variety of different systems, a diagnosis of your aquarium is necessary before changing over.

Before changing to our system, we recommend you get a **detailed analysis of your aquarium water** by using our **FAUNA MARIN ICP LAB**. Water tests performed by other labs which do not follow scientific test protocol cannot be used for proper water test result interpretation.

In nutrient poor aquariums, a qualified analysis of your aquarium is an important step to ensure a successful changeover. Order the FAUNA MARIN ICP TEST / FAUNA MARIN ICP TEST TOTAL for a complete analysis from our international online shop or US-shop.

Find our diagnostic questionnaire on our website's download center at www.faunamarin.de

Once the form is complete, email it to us. We'd be more than happy to advise you on the steps to take for a successful transition to our ZEO LIGHT SYSTEM.

Wishing you the best success! FAUNA MARIN GmbH

For more information or individualized advice, please write to us directly on our support forum: **Forum.faunamarin.de**

For further instructions, information on animals, and our other products, please visit us at www.faunamarin.de/download-center/

