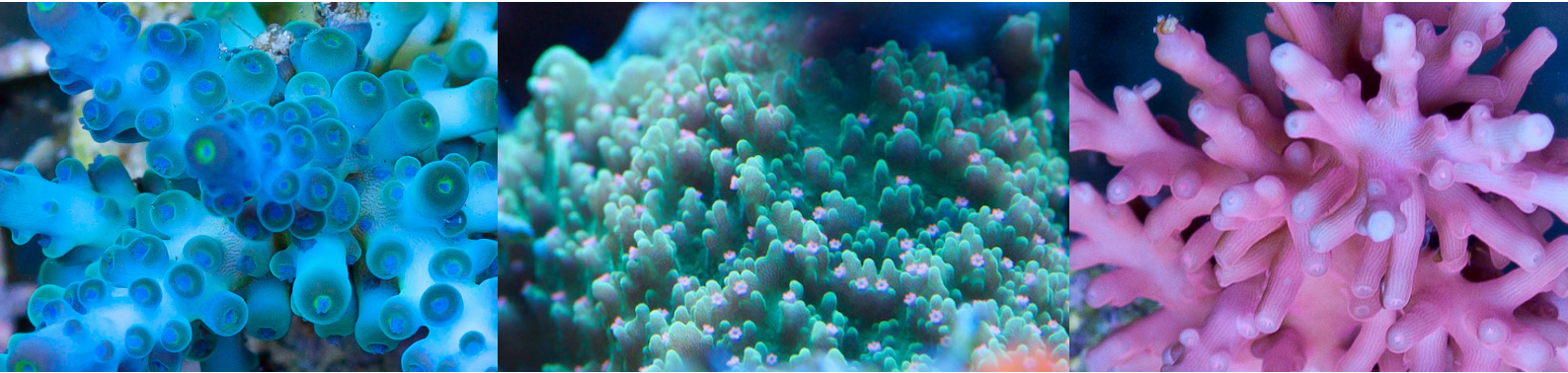


## Instructions for an easy & effective start with the Fauna Marin Zeo-Light-System

In a few steps to a fantastic reef aquarium, great colors, and perfect growth



In the last years diverse zeolite filtration systems, e.g. our Fauna Marin Ultralith system, have established on the market. Today, these systems are very popular among reef keepers to maintain perfect growth and coloration of sensitive stony corals and soft corals. Despite the fact that zeolite filtration using various natural zeolite mixes has proven great effectiveness, it turned out over the years to also be a complex methodology which requires a high degree of monitoring and control.

However, our new Fauna Marin Zeo-Light-System now provides you a zeolite filtration system for excellent results in coral coloration and growth without the need of supplementing countless additives. The application of only a few but very efficient products dosed each twice a week makes it possible to achieve perfect results. Based on the combination of the Ultralith system with our additional product series, the Fauna Marin Zeo-Light system is the groundwork for a longterm maintenance of a reef aquarium and prevents your aquarium from developing the „old-tank-syndrome“.

We decided to design this instruction guide in a very easy and comprehensive way. Thus, we present you only those products which are essential to the Zeo-Light-System. For further information or individual advice please contact us personally or find us in the online forums named below.

### **German**

[www.fauamarin.de](http://www.fauamarin.de)  
[www.meerwasserforum.info](http://www.meerwasserforum.info)  
[www.riffaquaristikforum.de](http://www.riffaquaristikforum.de)

### **English**

[www.reef2reef.com](http://www.reef2reef.com)  
[www.ultimatereef.net](http://www.ultimatereef.net)  
[www.sgreefclub.com](http://www.sgreefclub.com)

We run the Zeo-Light-System with our own aquarium facilities since a couple of years.

Fauna Marin products are in-house developments with unique receipts, which combine long-year established ingredients with newly identified micronutrients and marine biopolymers. The special composition of our products are fundamental to the great effectiveness of the Zeo-Light-System. Fauna Marin as a brand is pioneering the use of new micronutrients which have proven functional success in our bestselling products like UltraClam or LPS Grow and Color.

This manual has not the intend to discuss principle ideas about how to run a marine aquarium. Basically, in this instruction we use the Berlin System as a standard setup, with efficient protein skimming, use of live rock, stable water conditions and proper illumination. Our ultralith manual gives additional recommendations and provides further advice on water parameters and filtration methods. We strongly recommend the use of our professional sea salt and of our original Balling-Light-trace elements, to prevent the long-term accumulation of unwanted pollutants as contaminants in low quality salt mixes from the beginning.

The new Zeo-Light-System is based on few, but very effective products to allow for an easy maintenance of your marine aquarium.

**To apply the Zeo-Light-System to your aquarium you need the following products:**

Zeolight - zeolite mix  
Reef Vitality

Ultra Carb L water conditioning  
Color Elements trace elements

Ultramin S nutrient supply  
Ultra Easy potassium +

## Instruction

### Zeolight marine-zeolite-mix

As a basic dosage apply 1000 g ultralith mix to 1000 L (260 US gal lqd) aquarium net volume. Make sure you determine your net aquarium volume as exactly as possible. Use the zeolite mix in a zeolite filter unit or in our automatic zeolite filter Zeomatic 2. The automatic cleaning process of Zeomatic 2 makes it easy to maintain a high level of filter function. Without automated purgation the zeolite mix requires cleaning in a 2 day interval. 75% of the zeolite gravel needs to be replaced after 4 weeks (do not exchange the zeolite and UltraCarb L activated carbon on the same day, but use a 14 day shift as a routine in changing both types of filter media).

For preparation wash the zeolite mix under tap water or use reverse-osmosis water and subsequently give the material a 24 h bath in tap water. After this preconditioning the zeolite mix is ready.

Feel free to use any zeolite mix which is declared to be suitable for marine aquaria. However, we recommend to apply a zeolite from a producer with designated experience in the marine aquarium business, since several zeolite mixes for fresh water or pond filtration are unsuitable for marine aquaria and potentially have a harmful effect.

### Reef Vitality Marine Organics Growth-Booster & color enhancer

Particulate food for corals and sponges. Reef Vitality contains marine organic and inorganic elements which bear a high analogy to the chemical structure and composition of natural compounds. This allows for a perfect availability of the food ingredients for your corals.

By using ReefVitality, you increase the bacterial breakdown of unwanted waste products and help stabilizing the nutrient concentration on natural low levels. Reef Vitality binds excess nutrients and trace elements and thereby enhances the effectivity of protein skimming.

As a result of the supplementation of marine organics corals increase their nutrient uptake and also show a higher growth rate. This leads to a fundamental gain in color development, similar to the natural reef environment.

### Dosage and Usage

1 capsule per 500 Liter  
(126 US gal lqd) every 4 days.

Open the capsule and dissolve the substance in 100 mL aquarium water, shake well for at least 30 seconds. Subsequently apply the solution to the aquarium. For smaller Aquariums open the capsule and take a amount you need.

## Ultra Carb L

Continuous aquarium water treatment using UltraCarb L (super pure pelletized activated carbon) plays a fundamental role in the Zeo-Light-System. Ultra Carb L is essential to the keeping of sensitive SPS and LPS corals and therefore is applied permanently. The activated carbon treatment provides crystal clear water – phenoles, proteins, coloring substances, odor, and coral and algae toxins are removed effectively.

### Dosage

1 L (500 g) per 1000 L (260 US gal lqd) aquarium water if applied in a flow-through filter unit (flow rate max. 200 L ( 52 US gal lqd) / h). 2 L (approx. 1000 g) per 1000 Liter (260 US gal lqd) aquarium water if applied in a filter bag.

### Change interval

Replace the activated carbon after 4 weeks in a fortnightly alternate routine to the zeolite change.

### Preparation

Prepare new activated carbon after the following procedure:  
One day prior to the carbon replacement pour hot water (tapwater) over the carbon and subsequently give the carbon a 24 h bath.

## Color Elements

Color Elements are a novel set of growth and color enhancing trace elements, based on newest findings and perfectly adapting to modern sea salt mixes. Furthermore, our special emphasis was to include modern reef keeping aspects, i.e. LED illumination, to develop a state-of-the-art trace supplement covering all the needs of modern reef aquaria.

Through an innovative composition the specific micronutrients in Color Elements are both highly active and stable, and coral growth and coloration are increased significantly. The special combination of the elements prevents the accumulation of excess trace metals and thereby minimizes the growth of unwanted algae or cyanobacteria.

Color Elements are a perfect supplement for reef aquaria based on the Berlin-reef aquarium system including its modifications. The interplay between the elements in the 3 separated bottles allows for an individual and selective control of coral colors, and hitherto difficult to keep corals can be provided with limiting elements. Luminous fluorescing colors in LPS or soft corals are intensified as well as the chromoproteins in SPS corals. Additionally, growth activating substances support the availability and uptake of important nutrients.

### Common dosage

The common recommended dosage is 2-3 mL per 100 L (26 US gal lqd) every 4 days, a maximum dosage of 5 mL per 100 L (26 US gal lqd) should not be exceeded.

### INITIAL dosage

0,5 ml per 100 Liter (26 US gal lqd) every 4 days (alternately to the ReefVitality dosage) for the first 3 weeks . Subsequently increase the dosage in a monthly interval about 0,5 mL per 100 L (26 US gal lqd) until the desired results are achieved.

## Ultra Min S Nutrient supplementation

Ultra Min S is a nutrient media and food concentrate which we have developed especially in regard to colored stony (scleractinian) corals. Due to its special composition the ingredients are extremely fast taken up by corals, polyps visibly expand and coral mucus production is increased.

Ultra Min S contains various minerals, amino acids, vitamins and trace elements which not only activate the coral's metabolism, but also provides a solid nutrition for a vital microbial community.

### Dosage

1–3 mL per 1000 L (260 US gal lqd) every 2 days, applied directly to the aquarium.

### Overdosing

Symptoms of overdosing are a darkening of the coral tissue or a build-up of a white-greenish biofilms on the glass. If overdosing occurs, reduce the dosage about 50%.

## Ultra Easy potassium+

Zeolite filtration often enhances the potassium demand in reef aquaria and may cause potassium deficits which are not balanced through a regular water change. Thus, it is important to regularly determine the potassium content of your sea water using the Fauna Marin potassium test kit and to supply potassium to the water as needed.

The Zeo-Light-System does not necessarily include the adding of live bacteria to the reef aquarium. Albeit an increase in the results may be obtained through the provision of i.e. our bactoblend bacteria, such a procedure is not part of the basic Zeo-Light-System.

## Dosing scheme

Zeolith	1 kg per 1000 L (260 US gal lqd) using a constant but light flow-through, cleaning every 2 days, replace 75% of the zeolite every 4 weeks.
Reef Vitality	add 1 capsule per 500 Liter (126 US gal lqd) every 4 days, alternately to Color Clements.
Ultra Carb L	add 500 g per 1000 Liter (260 US gal lqd) to a flow-through filter unit applying 200 L/h.
Color Elements	2 mL per 100 L(26 US gal lqd) every 4 days, alternately to ReefVitality. Start dosage with 0,5 mL/100 L(26 US gal lqd) for the first 3 weeks. All 3 color elements can be dosed simultaneously. In regard to the desired color development the individual dosages should be modified. Maximum dosage: 5 mL per 100 Liter(26 US gal lqd) every 4 days.
Ultramin S	coral food and bacteria nutrition. Dosage 1–3 mL per 1000 L(260 US gal lqd) every 2 days.
potassium+	if needed, set the potassium concentration to 400 mg/L (ppm)
Additional supplements:	In case of extremely low nutrient levels, i.e. in coral breeding facilities, the nutrient level can precisely be adjusted by using UltraOrganic and UltraAmin.

## Some tips for perfect results with the Zeo-Light-System:

1. 10% weekly water exchange using a high quality sea salt brand.
2. Replace small amounts of aquarium sand/gravel, approx. 2% monthly.
3. Use combinations of metal halids/T5, LED/T5, or T5 solely.
4. Routinely replace the illuminants (T5/ metal halids) every 7–9 months.
5. Always follow the recommended dosages.
6. Appropriate animal stock: fish and a cleaning crew are very important for reef aquaria.
7. Use a sufficient amount of coral biomass. A reef aquarium needs a reliable amount of nutrient consuming organisms! Generally, only a few coral fragments are ineffective in competing algae or bacteria growth.
8. Sufficient current and water flow.
9. Frequent maintenance of all technical devices, i.e. cleaning of pumps, etc.

## Instructions for starting a new aquarium based on the Berlin-System

If you are planning to apply the ZEO-LIGHT-SYSTEM to a new aquarium setup, please stick to the following procedure:

### 1 Tag

- Set up the aquarium and install all technical devices
- Basic aquarium decoration: add reef rock or ceramic material as sub-construction.
- Add sand/gravel (approx. 3 mm grain size height 2- 4 cm/1-2 inch)
- Fill aquarium with RO-water or tapwater
- Start running the main filter pump and all aquarium pumps
- Check for leak tightness

### 7 Tag

- Check water parameters: calcium, magnesium, nitrate, nitrite, phosphate (in most cases the nitrite concentration is now elevated)

### 3 Tag

- Replace the water and refill with RO-water
- Add the sea salt and check salinity. Use a high-quality sea salt, i.e. Fauna Marin Professional Sea Salt, set temperature to 25°C and salinity to 34–35 psu.
- Install the zeolite filter unit and add the zeolite
- Start running the protein skimmer

### 10 Tag

- Check nitrite concentration: at this point the nitrite level should have decreased to < 0,1 mg/L (ppm).
- Start Balling dosages or install calcium reactor and set a proper calcium concentrations and alkalinity
- Add UltraCarb L to the carbon filter unit

### 5 Tag

- Continue aquarium decoration: add live rock (always make a preorder of good-quality reef rocks!)
- Check salinity, alkalinity, temperature
- Start aquarium illumination (10 hours per day)
- initial dosage: Bakto Blend
- Start dosing UltraMIN S every 2 days (1 ml per 1000 L(260 US gal lqd))

### 14 Tag

- Add hermits, snails and sea urchin; a couple of days later you can add a herbivorous algae Blenny (i.e. Salarias).
- Few days later start initial coral stocking!
- Increase the coral stocking every 7–10 days.