

### SPECIAL LIQUID ALGAECIDE AGAINST DINOFLAGELLATES AND GOLDEN ALGAE IN MARINE AQUARIUMS

- DINO X is a special liquid algaecide against gold algae and other dinoflagellates commonly found in marine aquaria.
- DINO X prevents algae growth in the aquarium and eliminates existing infestations
- DINO X is harmless to invertebrates and fish





## WHAT ARE DINOFLAGELLATES?

There is hardly a marine aquarist who does not know these pests.

Dinoflagellate infestation of a reef tank is a nightmare and most aquarists do not know how to deal with it. This HTU is designed to explain the steps you need to take and make using the DINO X product as easy and safe as possible. With this HTU you will get your dino plague under control. https://faunamarincorals.de/DINO-X/14290-VH Dinoflagellates are a group of unicellular algae, including zooxanthellae, which are symbionts of our corals. They are part of the reef community and most species are harmless and live as plankton in seawater.

A total of around 2,500 dinoflagellate species are known. In the marine aquarium we usually have to deal with species from five genera. Depending on the species, the countermeasures should be adapted, and the cause of dinoflagellate proliferation can also be different. Diagnosis is therefore the first step in taking the right measures and solving the problem.







DINO X is a special preparation for combating dinoflagellate and gold algae infections in reef aquariums. The preparation acts on the metabolism of the dinoflagellates and prevents the absorption of nutrients. In the process, these algae die. DINO X inhibits all algae and is harmless to all bacteria! It was specifically developed for use in marine aquariums and must not be used in aquaculture systems or in animals or plants intended for the production of food.

DINO X is not effective against bacterial smear algae (cyanobacteria).

### DINO X is particularly effective against dinoflagellates.

We recommend that you always carry out an exact diagnosis of the algae type before considering treatment with DINO X. If the recommended dosage is followed exactly, there are usually no or only a few side effects.

#### **Possible side effects**

In rare cases, problems may occur when using DINO X. These are listed below! Therefore, please pay close attention to our general information and the dosage instructions.

- Decrease of the redox value and slight decrease of the pH value.
- Sea urchins and other echinoderms, sea hares (e.g. Aplysia and Dolabella) and other algae eaters could be harmed and should therefore be temporarily removed from the tank before starting treatment if possible.
- Higher algae can also be damaged. Therefore, you should also remove them from the tank before starting treatment.
- Giant clams (Tridacna, Hippopus) and also some sea sponges can suffer slight damage. To be on the safe side, you should place them elsewhere during the treatment.

If the tank is heavily infested with algae, water turbidity may occur during the first use. This rarely occurs and can be reduced by sucking off the algae beforehand.





#### How to reduce toxin release from dying algae

Some of the algae that appear in the aquarium can release toxins when they die. This is one of the reasons why it is so important to vacuum up as much algae as possible before starting treatment. The less algae that decompose in the aquarium, the less toxins will be released. Especially aggressive and rapidly multiplying dinoflagellates release toxins that can harm corals and other invertebrates. DINO X should always be dosed in the evening or one hour after switching off the main lighting, as this is when the zooxanthellae stop their photosynthesis activity and the effect of the product is optimal.

### DINO X DOSAGE:

5 ml DINO X per 100 l aquarium water.

- It is very important that you calculate the volume of your aquarium as precisely as possible. This is the only way to ensure that you avoid under- or overdosing. In case of very heavy infestation and good skimming, you can increase the dosage up to 6 ml / 100 l.
- It is not possible to give a general indication of the duration of treatment because this depends on the type of algae concerned and the severity of the infestation. Repeat the dosage every other day until the algae have completely retreated. Dinoflagellates usually disappear after 10 - 15 dosing cycles (20 - 30 days).





# IMPORTANT TO NOTE:

- Limit the main lighting phase to a maximum of six 6 hours daily.
- Operate the skimmer at full power, around the clock (24/7) of course.
- **Do not perform partial water changes** during the entire treatment! First partial water change one week after the end of dosing.

Do not add trace elements during the treatment! Also no addition of mineral salts, amino preparations or SPS floating food. Supply systems such as the Balling Light System should, however, continue to be dosed.

- Do not use ozone or activated carbon during treatment!
- Relevant water values can be adjusted with balling, balling light or lime water. These have no influence on DINO X.

#### Do not use any adsorber filter materials during the treatment.

At the end of the treatment, use Fauna Marin **CARB L** activated carbon, according to the recommended dosage. Have a REEF ICP test done every week to adjust the water values correctly.



#### **TIP: REEF ICP-Test**

The Fauna Marin Reef ICP Test gives a quick and easy overview of 37 water values in seawater. You will receive an analysis of the most important macro and trace elements as well as pollutants with corresponding dosage and action recommendations. We measure your sample with the latest generation of optical emission spectrometers with inductively coupled plasma. These devices analyse the elements safely and accurately.

https://faunamarincorals.de/Reef-ICP/20392-VH



CARB L is a permanent activated carbon for longterm use in reef aquariums. High-purity, steamactivated, washed high-activity filter carbon made from the best raw material for carbon, lignin. Continuous filtration via Carb L (high purity activated pellet carbon) is a cornerstone of the Zeo-Light system. Carb L is used as "permanent carbon" and is suitable for the care of sensitive SPS and LPS corals. By filtering through activated carbon, the water remains crystal clear - phenols, protein compounds, dyes and nettle toxins are filtered out of the water and rendered harmless.

https://faunamarincorals.de/Carb-L/12160-VH





### TIPS AND TRICKS FOR TREATMENT:

- Increase the water temperature to 28 29 °C.
- Install a UV-C degerminator directly at the aquarium and channel the outlet water through nylon filter wadding, which is changed daily.
- Turn off the lights for two days at the beginning of the treatment.
- Install a silicate filter to prevent silicic acid from entering the aquarium.
- Vacuum off deposits regularly.
- Pay attention to water values and do an ICP test. Pay particular attention to the nutrient situation and adjust the nutrients to a ratio of 1:100.
- Pay attention to the concentration of the halogens iodine/fluorine and bromine and their ratio to each other. A deficiency of these elements favours a dinoflagellate infection.

Pay attention to the **DYNAMIC ELEMENTS** zinc, nickel, copper, vanadium and molybdenum. Set these elements to the reference values.



#### TIP: DYNAMIC ELEMENTS

Dynamic Elements are designed for use with egular ICP analyses. The perfect and individual element supply for your aquarium with copper, molybdenum, nickel, vanadium, zinc and iodine in a practical 250ml set. In combination with regular Fauna MarinICP water analyses, this is the ideal way to adjust your water values. https://faunamarincorals.de/Dynamic-Elements/15096-VH

## ADVICE:

You can find support for the product in our Facebook group: https://de-de.facebook.com/groups/1490705804549503/

or via our support contact: Support@faunamarin.de

#### **MUCH SUCCESS**

#### **FAUNA MARIN GmbH**

