

# INSTRUCTIONS FOR USE

# FAUNA MARIN AQUAHOMETEST PO<sub>4</sub>

Phosphate-Test | Saltwater aquaria





# FAUNA MARIN AQUAHOMETEST PO<sub>4</sub>



### Contents of package:

- $\bullet$  25 ml/0.85 fl.oz. of reagent A
- 6 ml/0.20 fl.oz. of reagent B
- 5 ml/0.17 fl.oz. of reference solution "standard"
- 2 glass cuvettes 20 ml
- 1 dosing syringe 20 ml
- 2 colour cards
- 1 comparator
- 1 instruction for use



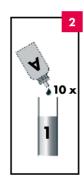


# Quick start guide:

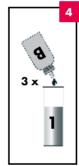
PO4 | PHOSPHAT-TEST | MEERWASSERAQUARIEN | SALTWATER AQUARIUMS KURZANLEITUNG | QUICK START GUIDE

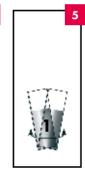




















### Precision for saltwater aquariums

Measurement range: 0.01 - 1.0 mg/l (0,26 US gal.) (ppm)

#### About phosphate (PO<sub>4</sub> 3-):

Phosphates are important nutrients for all plants and are vital for the energy metabolism of every living cell. Phosphates are released into the aquarium water via food and the decomposition processes of organic matter. However, an unregulated increase in the phosphate concentration creates problems, such as significant algae growth. In addition, phosphates in saltwater aquariums can seriously inhibit the deposition of calcium-carbonate in the skeleton formation process for hard corals and, in turn, their growth. On the other hand, there can be a shortage of phosphate if there is a high stock of plants and/or corals and a low fish population. In this situation, phosphate will need to be added. Some reef aquariums are intentionally set up to have ultra-low nutrient conditions – phosphate shortages can occur in cases such as these.

The phosphate concentration in natural saltwater is approximately 0.06 mg/l (0,26 US gal.) (ppm). However, the phosphate concentration in coral reefs may be much lower, typically between 0.01 and 0.02 mg/l (0,26 US gal.) (ppm).

We recommend that you prevent the concentration of phosphate from rising above 0.1 mg/l (0,26 US gal.) (ppm) in saltwater tanks and keep the concentration between 0.01 and 0.05 mg/l (0,26 US gal.) (ppm) in reef aquariums. To monitor this effectively, the phosphate concentration in the aquarium water should be tested regularly.





#### Instructions for use:

- 1. Shake the dropper bottles before use! Set up the enclosed comparator.
- 2. Rinse out both glass cuvettes with tap water and then several times with aquarium water.
- 3. Fill each glass cuvette with exactly **15 ml of aquarium water** using the dosing syringe.

  Put one of the two water samples aside as a reference.
- 4. Add **10 drops of test reagent A** to the test cuvette, close the glass cuvette using the stopper and **briefly shake the solution**.
- 5. Then add **3 drops of test reagent B**, close the glass cuvette once again and briefly shake it.





#### Instructions for use:

- 6. **After 4 minutes of development time** place the open test cuvette and the reference cuvette into the comparator. Place the comparator on the colour card in such a way that the reference cuvette is sitting on a coloured field and the test cuvette on a white field.
- 7. Now compare the opposing fields. To do this, look into the open cuvettes from above. Move the comparator on the colour card until both cuvette colours match exactly.
- 8. Read off the phosphate concentration under the relevant colour field.

  If the colours do not match exactly, an intermediate value can be estimated.
- 9. Rinse out the glass cuvettes and the syringe thoroughly with tap water after the measurement process.





# Using the "standard" to verify the test:

The shelf life of reagents depends on storage conditions and other factors. If the functional capacity of the test is inadequate, there will be no colour reaction during the test, even if phosphate levels are particularly high. If the measurement result is below 0.1 mg/l (ppm), add three drops of the reference solution "standard" to a new sample in order to verify the reliability of the test. If the colour changes to blue when you carry out the test again, then the reagents are verified as good.





#### How to correct unfavourable values:

If the phosphate concentration in the water is **too high**, we recommend:

- using the highly efficient adsorbers, like Fauna Marin PHOS 0,04,
   ULTRA-PHOS or POWER PHOS;
- using natural methods to lower the phosphate concentration such as the products Fauna Marin BACTO BALLS, BACTO BLEND, BACTO THERAPY;
- assessing and, where necessary, reducing the bio-mass of the tank inhabitants and feeding quantities or enriching the food with Fauna Marin GARLIC CONCENTRATE or FOOD ENERGIZER;
- removing detritus, dead plants and other dirt;
- stimulating the growth of organisms which consume nutrients, for example, more higher algae and corals in saltwater aquariums.





### How to correct unfavourable values:

If phosphate levels are **too low**, we recommend (with due consideration for the nitrate concentration at the same time):

- using Fauna Marin **ELEMENTALS P**as a balanced source of nutrients in saltwater aquaria;
- increasing the feeding quantities.







# **Safety instructions:**

**Solution A** contains: sulfuric acid 30 – 35 %.

Causes severe skin burns and eye damage.

IF SWALLOWED:

rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair):

Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes.

### Keep out of reach of children.



**DANGER** 





### TIP:

In order to protect the environment, the reagents for the Phosphate-Test **AQUA**HOME**TEST** are also available in affordable refill packs!







# Shelf life and storage:

6 months after opening. Store in a cool, dark place.

## Informationen and support:

For further information or individual advice please write to us directly in our support forum: https://forum.faunamarin.de

Further instructions, information about animals and our products can be found on our website **www.faunamarin.de** in the download center: **www.faunamarin.de/support-downloads/** 

In our knowledge database you will find further information about the understanding of laboratory analyses:

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

#### Good success!

FAUNA MARIN GmbH

