CALIBRATION OF TESTS

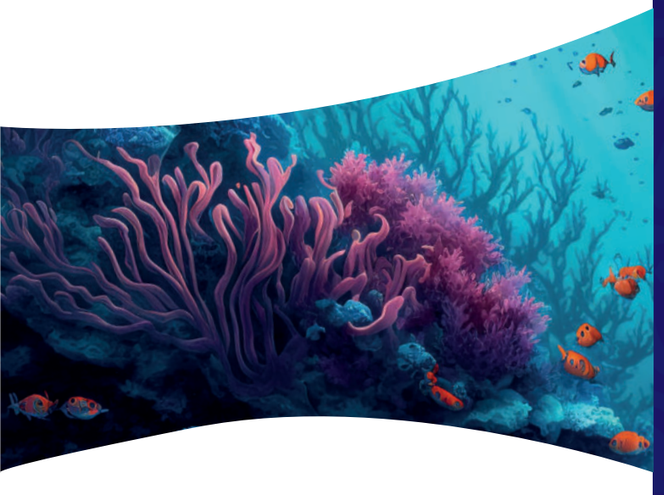
Why you should calibrate water tests

There are many good reasons to check or even calibrate water tests regularly. This is particularly useful for a new water test or one that has been open for some time. Ideally, you should use an unopened reference for checking or calibrating. It is not necessarily about the manufacturer‘s production quality, but rather about the following points:

Correct performance of the tests - As most water tests are similar, but often differ in some respects, user errors can quickly occur. By checking your tests, you can also ensure that you are using them correctly.

Your perception of the color change - Since everyone perceives colors and a color change slightly differently, you should calibrate your water tests. To do this, take several measurements, calculate the average and determine a fixed factor, which you then multiply by the measurement result. For our water tests, you can use Typus to do this.

Correct storage of the tests - Many reagents are susceptible to temperature. If stored incorrectly, your water test may no longer work properly.



WHAT IS KORALLENWÄCHTER?

Korallenwächter (Coral Guardian) is the brand under which we have turned our hobby into our profession. Since December 2021, we have been working on simplifying aquarium care and developing products for the water quality of marine aquariums.

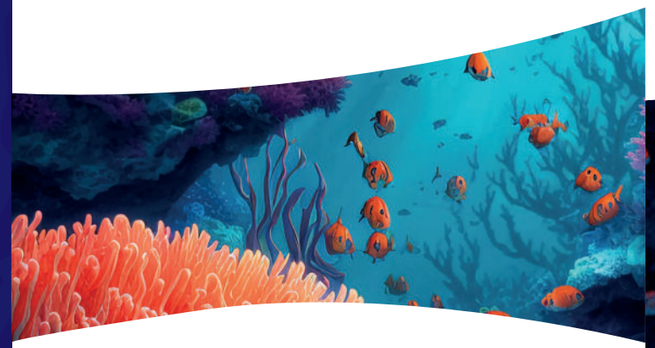
It is particularly important to us that our products are easy to use and sustainable in production, as well as individually tailored to the needs of each aquarium. As passionate aquarists, we were regularly confronted with problems relating to water quality. In discussions with other aquarists, we quickly realized that every aquarium is different and requires individual care. That‘s why we developed “Typus”. Typus is an app that helps you to always keep an eye on the water quality and everything to do with your aquarium and to recognize correlations. This means you can always take the right measures to care for your aquarium. Because measuring water quality is so important for marine aquariums, we have developed water tests that make measuring easier than ever before. Typus helps you to carry out the test, tells you exactly what to look out for and documents the measurement results clearly.

Because sustainability is important to us, we pay particular attention to using renewable resources for our packaging wherever possible. And if there is no other option, we make every effort to use recycled or recyclable materials. Perhaps you have already heard of the Coral Guard? To make measuring water quality even easier in the future, we developed a fully automatic measuring system that can be set up in just a few simple steps and is virtually maintenance-free. You can find out more on our website korallenwaechter.com.

ICP VS. WATER TEST

Why direct comparisons are difficult

An ICP can only be compared with water tests to a limited extent. An ICP is ideal for getting an overview of the composition of the aquarium water. In particular, you can use it to measure the elements that you cannot measure using conventional methods. However, you should always be aware that an ICP also has a measurement uncertainty and several possible sources of error. Measurement uncertainties occur with every measurement and can never be avoided. Possible sources of error can already arise during sampling. Therefore, always pay close attention to the manufacturer‘s instructions. We always recommend that you use a suitable reference when checking or calibrating water tests. Most references are tested by the manufacturer in the laboratory and you can therefore rule out errors in sampling. However, you should make sure that the reference is still stable and has not been opened for too long or even contaminated.



We also offer our own reference with which you can check your water tests.

INFO BROCHURE

FOR THE KORALLENWÄCHTER WATER TESTS

INSTRUCTIONS FOR IMPLEMENTATION

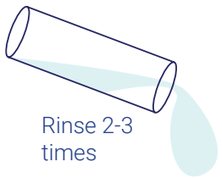
the Korallenwächter tests

There are a few things to bear in mind when taking the water sample and then carrying out the water tests. We have listed the most important ones here:

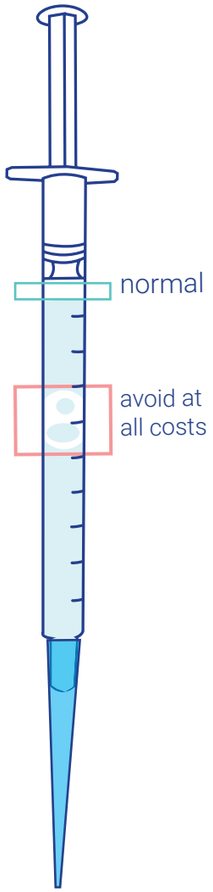
Take the sample slightly **below the water surface** so that you do not falsify your measurements, e.g. due to a residue film.

Always take measurements at a sufficient **distance from dosing or feeding.**

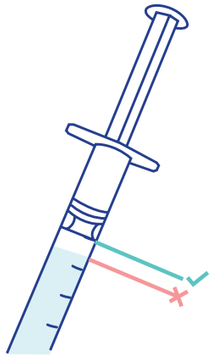
Do not take measurements **within an hour of a water change.**



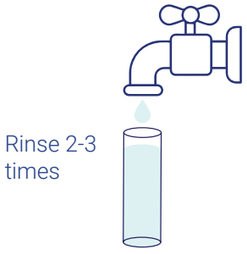
Rinse the sample vial several times with aquarium water **before each measurement.**



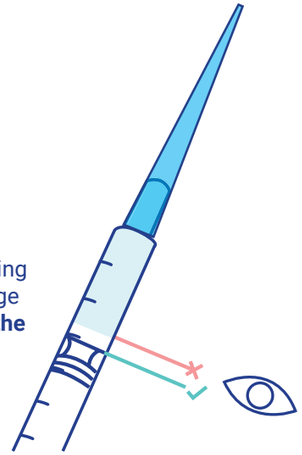
When drawing up the syringes, make sure that **no air bubbles** form in the syringe. However, it is normal for air to be trapped between the filling volume of the syringe and the syringe plunger.



Draw up both syringes so that the **lower end of the black plunger is on the mark,** not the water level.



Rinse the sample container thoroughly **after each measurement** with tap or osmosis water.



Read off the remaining quantity in the syringe at the **lower end of the black plunger.**

IMPORTANT TO KNOW!

The first measurement with a new test kit is particularly prone to errors. This is due to the fact that air pockets form more quickly in new syringes, which influence the actual amount of reagent or water sample in the syringe.

If a measurement shows an unexpected value, you should repeat the measurement before taking any action.

Measurements should be carried out at room temperature.

Do you have any questions about our water tests? Then please contact us at:

support@korallenwaechter.com