

Contents:

Phosphate reagent A
Phosphate reagent B
6ml syringe
2 x glass vials
Comparator
Phosphate standard solution

WARNING INFORMATION



Contains - Sulphuric Acid
Causes severe burns.

Keep locked up and out of reach of children.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After contact with skin, wash off immediately with plenty of water.

Wear suitable gloves and eye/face protection.

If swallowed seek medical advice immediately and show this container or label.

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Instructions available for download at our website:

www.theaquariumsolution.com

PHOSPHATE (PO₄) TEST KIT

Phosphate in the Aquarium

Maintaining a low level of phosphate (PO₄) is crucial for success in marine aquaria. Excessive levels of phosphate can give rise to increased algae populations, act as a calcification inhibitor in stony corals and clams, and is a limiting factor in achieving good coloration in stony corals.

Natural seawater has an average phosphate concentration in surface waters of around 0.005 ppm PO₄ with levels below 0.1 ppm PO₄ being recommended for aquariums containing stony corals up to perhaps 0.25 ppm PO₄ for more tolerant species. Levels below 0.005 are also undesirable however it is unlikely that you ever achieve a zero phosphate state due to the amount of phosphate added during daily feeding.

This high sensitivity test kit will allow the user to monitor levels of phosphate measured as PO₄ or P-PO₄ within the aquarium so that they may be maintained by way of regular water changes and by way of phosphate removing medias such as Rowaphos.

The test kit has both a high and a low range scale allowing it to be used to determine the exact level of phosphate in your aquarium.

High Range 0 - 5 ppm PO₄

Low Range 0 - 0.82 ppm PO₄

REFILLS ARE AVAILABLE FOR THIS TEST KIT

Instructions for use.

Important:

A - Rinse all test tubes, stopper/caps and syringes in reverse osmosis or de-ionized water several times before and after use to eliminate contamination which will affect the accuracy of the test kit.

Use of printed tissue or detergent on cleaning cloths to dry the vial will lead to contamination and a false positive reading. We recommend allowing to air dry.

B - Cross use of syringes, or test vials can result in contamination during testing leading to false test results. To ensure ongoing accuracy long term use only the correct components for each part of the test.

READ IN COMBINATION WITH THE PICTOGRAPHIC INSTRUCTIONS ON THE TEST CARD

Step 1: Using the 6 ml syringe supplied, measure out the amount of sample water to be tested depending on the range of test and add the same amount to each of the two glass vials.

Low range test

Add 12ml of tank water.

High range test

Add 2ml of tank water + 10ml of RO or DI water.

Steps 2-8 are the same for both high range and low range tests.

Step 2: Place one vial into the hole in the comparator furthest away from you and ensure that it is securely pushed down to the bottom. This will act as the standard and adjust the colour viewed for any discolouration within the tank water.

Step 3: Shake reagent bottle A and then add **7 drops** to the sample test vial. Cap the reagent bottle immediately after use.

Step 4: Cap the sample test vial using the stopper provided and shake briefly to mix, then remove the stopper.

Step 5: Shake reagent bottle B and then add **2 drops** to the sample test vial. Cap the reagent bottle immediately after use.

Step 6: Cap the sample test vial using the stopper provided and shake briefly to mix, then remove the stopper.

Step 7: Place the sample vial into the comparator alongside the standard sample and ensure that it is securely pushed down to the bottom. Place the comparator onto the colour chart with the vial containing the sample water and reagents nearest towards you.

Step 8: Wait exactly 6 mins for the colour to develop, then in good light, slide the comparator along the colour chart from right to left, looking from above, until the colour observed in the sample vial matches that shown in the standard vial.

The colour will remain stable for further 9 mins, therefore after 15 mins from starting the test the colour becomes invalid.

The phosphate level present in the sample can then be read off the colour card, either above the comparator position for low range tests or below for high range tests depending on the type of test being performed.

If a level below 0.25ppm PO₄ is attained on the high range test, it is recommended that the test is conducted again using the low range procedure.

The colour card shows the results as both phosphate PO₄ and also total phosphorus P-PO₄. The recommendations given are as phosphate PO₄ as this scale is more commonly used by the aquarist.

Reference Solution

The kit includes a reference solution and we recommend that you use this periodically to check the validity of your results. There is sufficient reference solution for 5 tests. Take care not to contaminate the reference solution and replace the lid immediately after use.