



# pH

## For pH value determination in marine aquariums by visual comparison with a color chart

### Definition

This test is designed to determine the pH value in marine aquariums in the range of 7.4 to 9.2.

The pH value indicates the acidity or alkalinity of a hydrous solution. Pure water has a defined pH value of 7 which makes it pH-neutral. Acidic solutions have pH values < 7 and alkaline solutions have pH values > 7.

Most marine fish require a pH value between 8.0 and 8.6. To avoid fluctuations and permanent decline/rise of the pH value regular testing is essential. Furthermore the carbonate hardness (KH) of the aquarium should be adjusted to the range of 5 to 10 °dKH to guarantee a stable pH value. <sup>\*1)</sup>

### Method

The pH value is visually determined by comparing a sample with the color chart. The matching color on the chart indicates the pH value.

### Reagents

The reagents are ready for use and have a shelf life until the printed expiry date. Store reagents at +15...25 °C and protected from direct light at the dark.

### Number of Determinations

The content is sufficient for approximately 120 analyses.

### Risks and Safety

Please observe the necessary precautions for use of laboratory reagents. Applications should be performed by expert personnel only. Follow the national and laboratory internal guidelines for work safety. Wear suitable protective clothing and disposable gloves while handling.

When used as intended, no hazardous product in the mind of the directives 1272/2008, 67/548/EWG or 1999/45/EG. Safety Data Sheet (SDS) not necessary.

Transport: road, air, sea: No limitation.



For additional safety information please refer to the information on the label and the corresponding Safety Data Sheet (SDS).

Download by QR-Code or link: [www.sds-id.com/100163-6](http://www.sds-id.com/100163-6)

### Content

073041-0030 1x 30 mL Reagent pH with testing vial and syringe (5 mL)

### Reference Range

The optimal pH value of marine aquariums is a slightly alkaline pH value and varies from 8.2 to 8.5. <sup>\*2)</sup>

### Application

#### Preparation

Use fresh aquarium water for analysis.

Rinse the testing vial several times with the sample water to be tested.

#### Procedure

Hold the dropper bottle vertically while adding drops. Close reagent bottle immediately after use.

- Use the enclosed syringe to fill the testing vial with exactly **5 mL** of the aquarium water. <sup>\*3)</sup>
- Add exactly **5 drops** of the reagent **pH** and mix well by gentle shaking (solution must be uniform colored).
- Put the testing vial on the color chart and compare the color under natural daylight by looking into the testing vial from above. Color comparison should take place within 5 minutes.
- The corresponding color field indicates the pH value of the water sample. Valid is the color gradation, not the color intensity. Note the corresponding pH.

If the reaction color lies between 2 circles, the pH value is between these values.

Procedure chart:

Sample:	5 mL
Reagent pH:	5 drops

Mix well and compare the color with the color chart at natural daylight within 5 minutes.

#### Attention!

The color chart is only valid in the original hardcopy (package insert). Printouts on color printers via PDF using uncalibrated printers can lead to incorrect colors and incorrect pH values. The same applies to comparison with a screen.



## Notes

This product information exclusively relates to the product described in this leaflet. In particular, this product information cannot be applied to similar reagents from other manufacturers.

### Instructions for Use

Close reagent bottle immediately after use, avoid touching the dropper. Rinse testing vial and syringe with tap water (ideally distilled water) and dry. Store syringe only in 0 mL position (syringe piston fully inserted). If the pH value is too high/low it should be adjusted to the optimal range. Furthermore a review of the carbonate hardness is recommended. Solutions containing dyes are subject to a limited shelf life. If the test results deviate strongly from the expected results the test should be reviewed with a reference solution.

### Support / Information service

For methodological and technical support, please contact us by E-Mail at [support@bioanalytic.de](mailto:support@bioanalytic.de) (German, English). Periodically check for updates of this product information on our website.

### Feedback

Information from users can be reported to [support@bioanalytic.de](mailto:support@bioanalytic.de) (German, English).

Suggestions for further developments will be considered.

### Waste Management

Please observe your national laws and regulations.

Used and expired solutions must be disposed of in accordance with your local regulations.

Inside the EU, national regulations apply that are based on the current, amended version of Council Directive 67/548/EEG on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances. Decontaminated packaging can be disposed of as household waste or recycled, unless otherwise specified.

## Literature & Footnotes

Legends for the graphic symbols and tags used follow relevant norms or are available on our internet pages.

- \*1) Carbonate hardness (KH) test kit also available. At KH values < 5 °dKH there is a risk of a sudden drop in acidity.
- \*2) This information is of limited validity. Depending on the composition of the aquarium the optimal pH value can vary. See relevant literature for further information.
- \*3) The expire date printed on the blister package of the syringe refers to the sterility and has no relevance to the measuring result.

## Color chart

