API®
MARINE

Over 550 Tests

SALTWATER MASTER TEST KIT

TESTS HIGH RANGE pH, AMMONIA, NITRITE & NITRATE

• Fast • Easy • Accurate

MESURE HIGH RANGE pH, AMMONIAQUE, NITRITES & NITRATES

• Rapide • Simple • Précis

GUIDE

Regular Care

Water Problem Solving

EN Instructions in English

FR Instructions en français

ES Instrucciones en español

中文 中文说明

Includes: 6 Test Bottles, Easy-to-Read Instructions, Glass Test Tubes & Color Chart

ENGLISH

To remove childproof safety caps: With one hand, push red tab left with thumb while unscrewing cap with free hand.

HIGH RANGE pH TEST

Why Test pH?

pH is the measure of acidity of water. A pH reading of 7.0 is neutral. A pH higher than 7.0 is alkaline, and a pH lower than 7.0 is acidic. Maintaining the aquarium at the proper pH ensures optimal water quality. The pH should be tested weekly, since natural materials in the aquarium (such as fish waste and uneaten food) can cause pH changes.

Testing Tips

The minimum pH reading for this kit is 7.4 and the maximum is 8.8. Under extreme water conditions, readings below the minimum will read 7.4 and above the maximum will read 8.8. pH adjustments outside the range of this kit will not show any changes until the pH of the aquarium water is within the range of this kit.

Directions

1. Fill a clean test tube with 5 ml of water to be tested (to the line on the tube).
2. **Add 5 drops of High Range pH Test Solution**, holding dropper bottle upside down in a completely vertical position to assure uniformity of drops.
3. Cap the test tube & invert tube several times to mix solution.
4. Read the test results by comparing the color of the solution to the High Range pH Color Chart. The tube should be viewed in a well-lit area against the white area of the chart. The closest match indicates the pH of the water sample. Rinse the test tube with clean water after use.

Recommended pH Levels

A pH of 7.5 is ideal for most live-bearing fish, such as mollies & swordtails. Goldfish will also thrive at a pH of 7.5. African cichlids prefer a pH of 8.2. Marine fish & invertebrates require a pH between 8.2 – 8.4. To raise or lower the pH of a freshwater aquarium, use API pH UP or pH DOWN. Also, API PROPER pH 7.5 may be used to automatically adjust & hold pH at 7.5. PROPER pH 8.2 may be used in African cichlid and saltwater aquariums.

AMMONIA TEST

Why Test for Ammonia?

Fish continually release ammonia (NH_3) directly into the aquarium through their gills, urine, and solid waste. Uneaten food and other decaying organic matter also add ammonia to the water. A natural mechanism exists that controls ammonia in the aquarium – the biological filter. However, as with any natural process, imbalances can occur. So, testing for the presence of toxic ammonia is essential. Ammonia in the aquarium may damage gill membranes, and prevent fish from carrying on normal respiration. High levels of ammonia quickly lead to fish death. Even trace amounts stress fish, suppressing their immune system and increasing the likelihood of disease. Using API QUICK START® will help accelerate the development of the biological filter.

Testing Tip: This salicylate-based ammonia test kit reads the total ammonia level in parts per million (ppm) [equivalent to milligrams per liter (mg/L)] from 0 - 8.0 ppm (mg/L).

Directions

1. Fill a clean test tube with 5 ml of water to be tested (to the line on the tube).
2. **Add 8 drops from Ammonia Test Solution #1**, holding the dropper bottle upside down in a completely vertical position to assure uniformity of drops.
3. **Add 8 drops from Ammonia Test Solution #2**, holding the dropper bottle upside down in a completely vertical position to assure uniformity of drops.
4. Cap the test tube & shake vigorously for 5 seconds.
5. **Wait 5 minutes for the color to develop.**
6. Read the test results by comparing the color of the solution to the Ammonia Color Chart. The tube should be viewed in a well-lit area against the white area of the chart. The closest match indicates the ppm (mg/L) of ammonia in the water sample. Rinse the test tube with clean water after use. Note: Do not pour test tube contents back into the aquarium.

Reducing Ammonia Levels

In a new aquarium the ammonia level may rise and then fall rapidly as the biological filter becomes established. The ammonia will be converted to nitrite (also toxic), then to nitrate. This process may take several weeks. It is recommended to use API QUICK START to help establish the biological filter, lower ammonia and nitrite, and reduce the risk of fish loss. In an established aquarium, the ammonia level should always remain at 0 ppm (mg/L); any level above 0 can harm fish.

To reduce risk of fish loss, if ammonia levels continue to test high in your aquarium (4 ppm or mg/L), perform a water change of 25% or more, then add API AMMO LOCK® to quickly detoxify ammonia. AMMO LOCK will convert ammonia to a non-toxic form. The Ammonia test kit will still test positive for ammonia, even though treating with AMMO LOCK has made it non-toxic. A daily water change may be required over several days. Be sure to use a water conditioner, such as STRESS COAT®, when adding tap water back into the aquarium.

WARNING

AMMONIA TEST SOLUTION #1

Harmful if swallowed • Harmful in contact with skin • Harmful if inhaled • Causes serious eye irritation • Use only in outdoors or in a well-ventilated area • Avoid breathing dust /fume/ gas/mist/vapors/spray • Do not eat, drink or smoke when using this product • Wear protective gloves/protective clothes/eye protection/face protection • Specific treatment (see advice on this label) • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention • IF SWALLOWED: Call a POISON CENTER / Doctor / Physician / first aider / if you feel unwell • IF ON SKIN: Wash with plenty of water and soap • IF INHALED: Remove person to fresh air and keep comfortable for breathing • Rinse mouth • Take off contaminated clothing and wash before reuse • Dispose of contents/container to authorized chemical landfill or if organic to high temperature incineration.

DANGER

AMMONIA TEST SOLUTION #2

May be corrosive to metals • Causes severe skin burns and eye damage • Causes serious eye damage • Harmful to aquatic life•Do not breathe dust / fume / gas / mist / vapors / spray • Wear protective gloves/ protective clothes/ eye protection/face protection • Keep only in original container • Avoid release to environment • IF SWALLOWED: Rinse mouth. DO NOT induce vomiting • IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing • Immediately call a POISON CENTER/Doctor/Physician/first aider • Specific treatment (see advice on this label) • Wash contaminated clothing before reuse • Absorb spillage to prevent material damage • IF INHALED: Remove person to fresh air and keep comfortable for breathing • Store locked up • Dispose of contents/container to authorized chemical landfill or if organic to high temperature incineration.

NITRITE TEST

Why Test For Nitrite?

Nitrite (NO_2^-) is produced in the aquarium by the biological filter. Beneficial bacteria in the biological filter convert ammonia into nitrite. The biological filter then converts nitrite into nitrate (NO_3^-). Nitrite in the aquarium is toxic; it will prevent fish from carrying on normal respiration, and high levels will quickly lead to fish death. Even trace amounts of nitrite stress fish, suppressing their immune system and increasing the likelihood of disease. Too many fish, as well as uneaten fish food and decomposing plants and other organic matter can cause excessive nitrite levels. Water should be tested for nitrite every other day when the aquarium is first set up, and once a week after the biological filter has been established (in about 4 - 6 weeks). Using API QUICK START will help accelerate the development of the biological filter.

Testing Tips

This test kit reads total nitrite (NO_2^-) level in parts per million (ppm) which are equivalent to milligrams per liter (mg/L) from 0 - 5.0 ppm (mg/L).

Directions

1. Fill a clean test tube with 5 ml of water to be tested (to the line on the tube).
2. **Add 5 drops of Nitrite Test Solution**, holding dropper bottle upside down in a completely vertical position to assure uniformity of drops.
3. Cap the test tube and shake for 5 seconds.
4. **Wait 5 minutes for the color to develop.**
5. Read the test results by comparing the color of the solution to the Nitrite Color Chart. The tube should be viewed in a well-lit area against the white area of the chart. The closest match indicates the ppm (mg/L) of nitrite in the water sample. Rinse the test tube with clean water after use.

What the Test Results Mean

In new aquariums the nitrite level will gradually climb to 5 ppm (mg/L) or more. As the biological filter becomes established, nitrite levels will drop to 0 ppm (mg/L). In an established aquarium, the nitrite level should always remain at 0; any level above 0 can harm fish. The presence of nitrite indicates possible over-feeding, too many fish, or inadequate biological filtration.

Reducing Aquarium Nitrite Levels

Making partial water changes can also help reduce nitrite, especially if the initial level is very high. Use API QUICK START to help speed the development of the biological filter. Adding API AQUARIUM SALT will reduce nitrite toxicity to fish while the biological filter is removing the nitrite.

NITRATE TEST

Why Test for Nitrate?

Nitrate (NO_3^-) is produced in the aquarium by the biological filter. Beneficial bacteria in the biological filter convert toxic ammonia and nitrite into nitrate. A high nitrate level indicates a build-up of fish waste and organic compounds, resulting in poor water quality and contributing to the likelihood of fish disease. Maintaining a low nitrate level improves the health of fish & invertebrates. Excessive nitrate also provides a nitrogen source that can stimulate algal blooms. Aquarium water should be tested for nitrate once a week to make sure the nitrate does not reach an undesirable level.

Testing Tip: This test kit reads total nitrate (NO_3^-) level in parts per million (ppm) which are equivalent to milligrams per liter (mg/L) from 0 - 160 ppm.

Directions

1. Fill a clean test tube with 5 ml of water to be tested (to the line on the tube).
2. **Add 10 drops from Nitrate Test Solution #1**, holding dropper bottle upside down in a completely vertical position to assure uniformity of drops.
3. Cap the test tube & invert tube several times to mix solution.
4. **Vigorously shake the Nitrate Test Solution #2 for at least 30 seconds. This step is extremely important to insure accuracy of test results.**
5. **Now add 10 drops from Nitrate Test Solution #2**, holding dropper bottle upside down in a completely vertical position to assure uniformity of drops.
6. **Cap the test tube and shake vigorously for 1 minute. This step is extremely important to insure accuracy of test results.**
7. **Wait 5 minutes for the color to develop.**
8. Read the test results by comparing the color of the solution to the Nitrate Color Chart. The tube should be viewed in a well-lit area against the white area of the card. The closest match indicates the ppm (mg/L) of nitrate in the water sample. Rinse the test tube with clean water after use.

What the Test Results Mean

In new aquariums the nitrate level will gradually climb as the biological filter becomes established. In marine aquariums, it is best to keep nitrate as low as possible, especially when keeping invertebrates.

Reducing Nitrate Levels

Making partial water changes can also help reduce nitrate, especially if the level is very high. However, because many tap water supplies contain nitrate, it can be difficult to lower nitrate levels by this method.

DANGER

NITRATE TEST SOLUTION #1

May be corrosive to metals • Harmful if inhaled • Causes severe skin and eye damage. Causes serious eye irritation • May cause respiratory irritation • Do not breathe dust / fume / gas / mist / vapors / spray • Use only in outdoors or in a well-ventilated area. Wear protective gloves / protective clothes / eye protection / face protection • Keep only in original container • IF SWALLOWED: Rinse mouth. DO NOT induce vomiting • IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing • Immediately call a POISON CENTER / Doctor / physician / first aider • Specific treatment (see advice on this label) • If eye irritation persists: Get medical advice/attention • Wash contaminated clothing before use • Absorb spillage to prevent material damage • IF INHALED: Remove person to fresh air and keep comfortable for breathing • Store locked up • Store in a well-ventilated place • Keep container tightly closed • Dispose of contents/container to authorized chemical landfill or if organic to high temperature incineration.

WARNING

NITRATE TEST SOLUTION #2

Suspected of causing genetic defects • Wear protective gloves/protective clothes/eye protection / face protection • If exposed or concerned: Get medical advice / attention • Store locked up • Dispose of contents/container to authorized chemical landfill or if organic to high temperature incineration.