

# Nitrite Reagent Operation Method

1. Rinse the measurement tube 2-3 times with the water sample waiting to be measured.



2. Take 4ml of the test solution into the test tube.



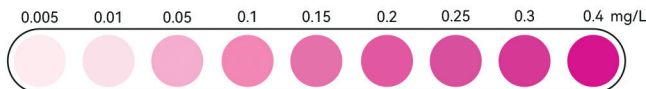
3. Add a level spoonful of nitrite powder into the test tube



4. Shake well and let stand for 2 minutes



5. Visually compare the color with the standard color card from top to bottom



## Usage:

Rinse the test tube 2-3 times with the water sample to be measured, then take the water sample to the 4ml mark, add a flat spoonful of nitrate salt powder, cover the tube, shake well and let stand for 2 minutes. Place the test tube on the test tube rack and the blank space of the color card, and visually compare the color from top to bottom. The color scale with the same color is the nitrate content of the water sample.

## Explanation:

The powder is corrosive and contact with skin and children should be avoided.

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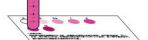
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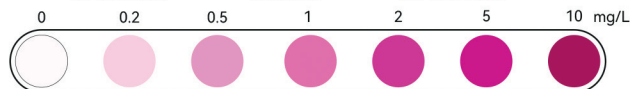
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5. Visually compare the color with the standard color card from top to bottom



## Usage:

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## Explanation:

The powder is corrosive and contact with skin and children should be avoided.

# Total Alkalinity Test Instructions

1. Rinse the measurement tube 2-3 times with the water sample to be measured.



2. Take 4ml of the solution to be tested into the test tube



3. Add 5 drops of total alkalinity reagent I and shake well



4. Water sample solution turns green



5. Slowly add total alkalinity reagent II drop by drop, shaking gently after each drop added. When the water sample solution turns gray-green, it indicates that the end point is approaching. Add carefully and slowly until it just turns wine red.



6. Record the number of drops of total alkalinity reagent II consumed, and convert the total alkalinity value from the results.



| Number of Drops |                                      | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|-----------------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| KH              | mmol/L Calculated as H+              | 0.45  | 0.90  | 1.35  | 1.80  | 2.25  | 2.70  | 3.15  | 3.60  |
|                 | mg/L Calculated as CaCO <sub>3</sub> | 22.5  | 45.0  | 67.5  | 90.0  | 112.5 | 135.0 | 157.5 | 180.0 |
|                 |                                      |       |       |       |       |       |       |       |       |
| Number of Drops |                                      | 9     | 10    | 11    | 12    | 13    | 14    | 15    |       |
| KH              | mmol/L Calculated as H+              | 4.05  | 4.50  | 4.95  | 5.40  | 5.85  | 6.30  | 6.75  |       |
|                 | mg/L Calculated as CaCO <sub>3</sub> | 202.5 | 225.0 | 247.5 | 270.0 | 292.5 | 315.0 | 337.5 |       |
|                 |                                      |       |       |       |       |       |       |       |       |

## Precautions:

- If the amount exceeds 15 drops, it can be diluted with pure water and measured again. The total alkalinity of the water sample can be calculated based on the dilution factor.
- The reagents in this test kit are corrosive and are strictly prohibited from contact with the skin and kept out of the reach of children.

# Total Hardness Instructions

1. Rinse the measuring tube 2-3 times with the measured water sample.



2. Take 4ml of the measured water sample into the test tube.



3. Add 2 drops of total hardness reagent ① and shake well.



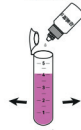
4. Add a spoonful of total hardness reagent ② and shake well to dissolve.



5. The water sample turns purple-red.



6. Slowly add total hardness reagent ③, and shake gently after each drop. When the water sample turns blue-purple, it indicates that the end point is approaching. Add carefully add until it just turns blue.



7. Record the number of drops of total hardness reagent ③ consumed, and find the total hardness value from the result conversion table



| Number of Drops |                                 | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     |
|-----------------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GH              | mmol/L                          | 0.675 | 0.900 | 1.125 | 1.350 | 1.575 | 1.800 | 2.025 | 2.250 | 2.475 |
|                 | US GH (mg/L CaCO <sub>3</sub> ) | 67.5  | 90.0  | 112.5 | 135.0 | 157.5 | 180.0 | 202.5 | 225.0 | 247.5 |
|                 | GER GH (10mg/L CaO)             | 3.8   | 5.0   | 6.3   | 7.6   | 8.8   | 10.1  | 11.3  | 12.6  | 13.9  |
|                 |                                 |       |       |       |       |       |       |       |       |       |
| Number of Drops |                                 | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    |
| GH              | mmol/L                          | 2.700 | 2.925 | 3.150 | 3.375 | 3.600 | 3.825 | 4.050 | 4.275 | 4.500 |
|                 | US GH (mg/L CaCO <sub>3</sub> ) | 270.0 | 292.5 | 315.0 | 337.5 | 360.0 | 382.5 | 405.0 | 427.5 | 450.0 |
|                 | GER GH (10mg/L CaO)             | 15.1  | 16.4  | 17.6  | 18.9  | 20.2  | 21.4  | 22.7  | 23.9  | 25.2  |
|                 |                                 |       |       |       |       |       |       |       |       |       |

## Precautions:

- If more than 20 drops, you can use purified water to dilute it by multiples, then measure, and then calculate the total hardness of the water sample based on the dilution multiple.
- The reagents in this test kit are corrosive, so be careful not to touch the skin and keep them out of reach of children.