KYORITSU PACKTEST INSTRUCTIONS

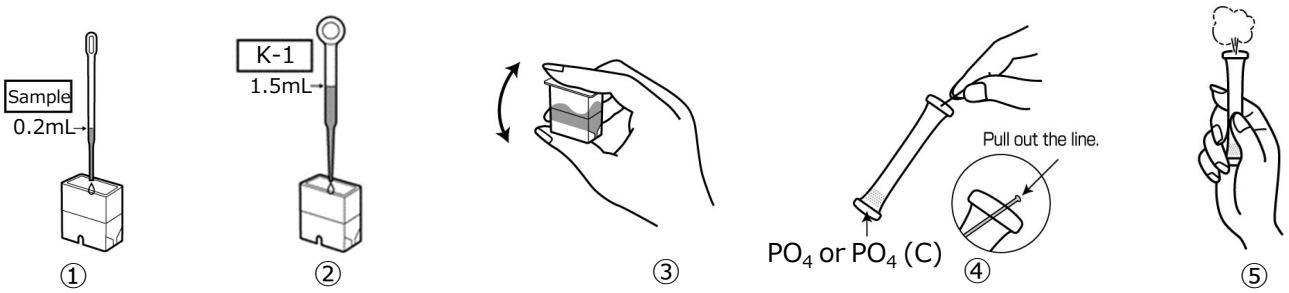
Phosphate (High Range)

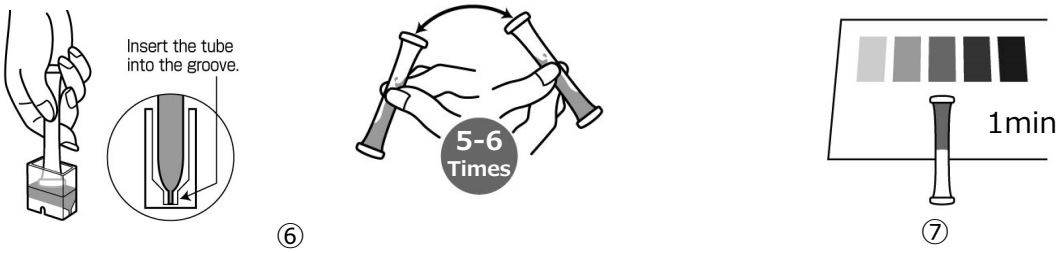
Molybdenum Blue Visual Colorimetric Method

Measuring Range: <Phosphate Ion> 2 - 100 mg/L(ppm)
<Phosphate-Phosphorus> 0.66 - 33 mg/L(ppm)

Model : WAK-PO_4(C)

How to Use





① Take 0.2mL of the sample into Cell (PACKTEST Square Cup) with Small Pipette.
② Add 1.5mL of K-1 Reagent with Large Pipette
③ Close the cap and shake the Cell for 2 to 3 times.
④ Remove the colored line at the top of the tube to clear the aperture.
⑤ Press the tube's side wall to expel the air and hold the tube.
⑥ Immerse the aperture of the tube into the sample, release the finger to fill the tube halfway. Invert the tube back and forth lightly for 5 to 6 times.
⑦ After 1min, place the tube on the provided Standard Color as shown to compare the color.

How to Read the Result

After the reaction time, compare the color of the tube with Standard Color. The nearest color indicates the concentration value of the analyte in your sample. A color between two standard colors indicate the value between them.

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Handling of PACKTEST Before and After Use

K-1 Reagent and content of the tube is **Strong Acid**.

First Aid

Eye Contact → Immediately flush eyes with water for at least 15 minutes, followed by consult with Ophthalmologist, even without any symptom.
Skin/Cloth Contact → Immediately flush contacted area with water.
Ingestion → Immediately rinse mouth.
If swallowed the content or any symptom appears, seek medical advice immediately.
Please refer to SDS for further information.

Storage

Use PACKTEST tubes as soon as possible after opening the laminated package.

Disposal

For business use, please follow in the manner consistent with relevant laws and regulations.
Otherwise, the tube can be disposed as combustible waste.

PACKTEST Phosphate (High Range)

Caution

1. With this method, only phosphate ions in the sample water can be measured, and hydrolysable phosphorus and total phosphorus cannot be measured.
2. This product provides measurement for both phosphate ion (PO_4^{3-}) and phosphate phosphorus (PO_4^{3-}-P) in the sample water.
3. The optimum pH upon reaction will be around 1. If the pH of the sample exceeds 1-9, please neutralize with dilute sodium hydroxide solution or dilute sulfuric acid prior to measurement.
4. A Phosphate standard solution of 1000mg/L develops a color equal to or higher than 100 on the Standard Color. When the value is expected to be high, please dilute the sample prior to use.
5. Keep the sample and K-1 reagent temperature between 15-40℃. If the sample temperature is low, it requires longer reaction time.
6. Please rinse the small pipette with pure water or same sample for measurement prior to use.
7. Using measuring pipette instead of provided plastic pipette will provide better accuracy.
8. Ensure that the PACKTEST tube is filled up to half.
9. Partially undissolved reagent will not affect the measurement.
10. When comparing to the Standard Color, please be sure to read under the daylight. It may be difficult to determine the color under the direct sunlight, certain florescent lights, mercury lamp or LED.
11. You can put the line back into the aperture to seal. This will avoid possibility of spilling the content of the tube.

Interference

Standard Color is prepared based on the standard solution. If there are some coexisting substances that may cause interference, please compare the result with official method or standard addition method for verification. Below is the list of interference data for on color development when adding each of the single substances to the standard solution.

≤5000mg/L	will not affect	⋯ Al^{3+}, B(III), Ba^{2+}, Ca^{2+}, Cd^{2+}, Cl^-, CN^-, Fe^{2+}, I^-, K^+, Mn^{2+}, Na^+, NH_4^+, NO_2^-, NO_3^-, SO_4^{2-}, Zn^{2+}, Phenol
≤2500mg/L	〃	⋯ Cu^{2+}, Ni^{2+}
≤1250mg/L	〃	⋯ Co^{2+}, Mg^{2+}
≤500mg/L	〃	⋯ Cr^{3+}, Fe^{3+}, Pb^{2+}, Residual Chlorine, Silica
≤250mg/L	〃	⋯ Mo(VI)
≤100mg/L	〃	⋯ Cr(VI), F^-
Any Level	will affect	⋯ As(V)

Seawater does not affect the result.
Oxidizing substances may affect the result.

【Caution】

- This product is made for analyzing water quality purpose only. Do not use for any other purpose.
- This product contains small amount of chemicals. Please read instruction manual, GHS labels, SDS, and other necessary document thoroughly prior to use.
- Please keep this information handy for future reference.

<Safety>
- Please wash your hands thoroughly before and after the test. Do not inhale the chemical reagents.
- It is highly recommended to wear protective gloves, eye protection, and mask upon using this product.
- Avoid release chemical reagents or waste solution to the environment.

<Storage>
- Please keep this product out of reach of children. Keep it in the dry and dark place at room temperature.

<Other>
- Please check the expiration date shown on the box, and make sure to use within the date.
- Specifications are subject to change without notice.

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