



KYORITSU

PACKTEST
ION SELECTIVE

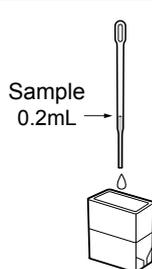
INSTRUCTIONS

Phosphate (High Range)

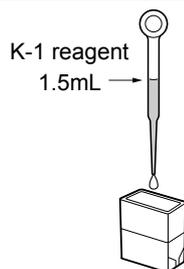
<Phosphate-Phosphorus>
Model WAK-PO₄(C)

Molybdenum blue Method
Main reagent: Ammonium MolybdateRange: 2 - 100 mg PO₄³⁻/L (ppm)0.66 - 33 mg PO₄³⁻-P/L (ppm)

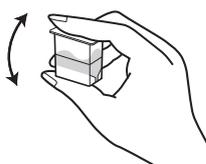
How to use



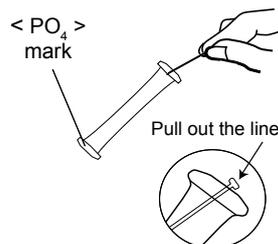
(1) Put 0.2 mL of sample into the Cell (PACKTEST Square Cup) with the small pipette.



(2) Add 1.5 mL of K-1 reagent with the large pipette.



(3) Put on the cap and shake the Cell 2-3 times.

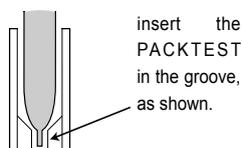


(4) Remove the line to clear the aperture from the top of the tube.

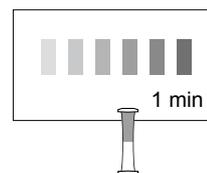


(5) Press the sides of the tube to expel approximately half of volume. Maintain pressed.

(6) Immerse the tube in the sample. Release the sides to fill the tube up to the half. Shake the tube lightly a few times.



(7) After 1 minute, put the tube on the color chart as shown and compare with the standard colors.



How to read the test

After the reaction time, compare the color of the tube with the standard colors. The nearest color indicates the measured value of the sample. A color between two standard colors indicates a value between the two standard values.

Care in handling of PACKTEST before and after use

Keep PACKTEST in a cool, dry and dark place.

PACKTEST should be thrown with burnable garbage. Conform to the legislation of waste management.

Use a package as soon as possible after opening.

First Aid Measures

K-1 reagent contains diluted sulfuric acid (pH<2). It is harmful and corrosive.

Eye contact → Immediately rinse eyes with water for at least 15 minutes. Consult a physician.

Skin contact → Immediately flush skin with water.

Ingestion → Immediately rinse mouth. Consult a physician.

In case of doubt, consult a physician.

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PACKTEST Phosphate (High Range)

Features

The Phosphate PACKTEST is based on the molybdenum blue color comparison method. The Phosphate (High Range) PACKTEST allows to measure phosphate concentration easily of sample like septic tank, waste water or water culture medium, in the range 2 - 100 mg/L.

For lower concentration, ex: environmental water samples, we recommend to use either the Phosphate PACKTEST (ref: WAK-PO₄, 0.2 - 10 mg PO₄³⁻ /L) or the Phosphate (Low Range) PACKTEST (ref: WAK-PO₄(D), 0.05 - 2 mg PO₄³⁻ /L).

Cautions

1. The Phosphate (High Range) PACKTEST can only measure dissolved ions. Condensed phosphorus or Total-phosphorus can not be measured. A pretreatment is required for the measurement of these parameters.
2. The Phosphate (High Range) PACKTEST can measure both phosphate ion (PO₄³⁻) and phosphate-phosphorus (PO₄³⁻-P)
3. The normal pH range is 1 - 10. If necessary, adjust the pH with diluted sulfuric acid or sodium hydroxide solution.
4. Ensure that PACKTEST tube is filled up to the half.
5. Partially undissolved reagent will not affect the measurement.
6. Keep sample temperature in the range 15°C - 40°C. Lower temperature necessitates longer reaction time.
7. Read the test under daylight type lamp.
8. Carefully rinse the small pipette after use.
9. Put the line back into the aperture after use to prevent reagent spilt.

Interferences

Standard colors were determined from standard solutions. However, coexisting substances will cause inaccurate results. The list below reports ion concentrations under which ones interferences are insignificant:

≤ 5000 mg/L : Al³⁺, B³⁺, Ba²⁺, Ca²⁺, Cd²⁺, Cl⁻, CN⁻, Fe²⁺, I⁻, K⁺, Mn²⁺, Mo⁶⁺, Na⁺, NH₄⁺, NO₂⁻, NO₃⁻, Sn²⁺,
SO₄²⁻, Zn²⁺, Phenol, Residual Chlorine

≤ 2500 mg/L : Cu²⁺, Ni²⁺

≤ 1250 mg/L : Co²⁺, Mg²⁺

≤ 500 mg/L : Cr³⁺, Fe³⁺, Pb²⁺, SiO₂

≤ 100 mg/L : Cr⁶⁺, F⁻

Sub-ppm level : As³⁺, As⁵⁺

The Phosphate (High Range) PACKTEST is not suitable for sea water samples. Oxidative chemical can interfere with the measurement.