



KYORITSU

PACKTEST

INSTRUCTIONS

Zinc (Low Range)

Model WAK-Zn (D)



5-Br-PAPS Visual Colorimetric Method

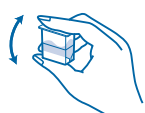
Main Reagent: 5-Br-PAPS

Range: Zn 0 - >2 mg/L(ppm)

How to Use

K-1
Reagent

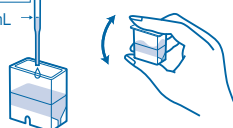
① Fill the Cell (PACK TEST Square Cup) up to the line (1.5mL) with sample. Add content of K-1 Reagent (small tube).



② Place the cap and shake well to dissolve reagent completely.

K-2
Reagent

0.3mL

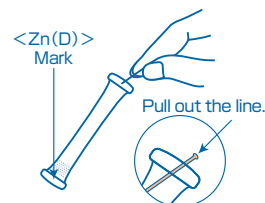


③ Add 0.3mL of K-2 Reagent with plastic pipette. Place the cap again, and shake for 2-3 times.

5 min.



④ Open the cap and leave to stand for 5min.

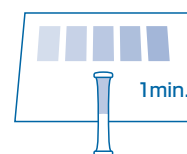
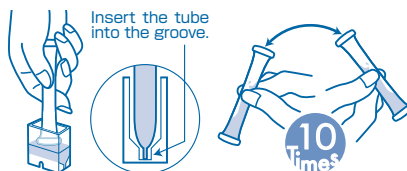


⑤ Remove the colored line at the top of the tube to clear the aperture.

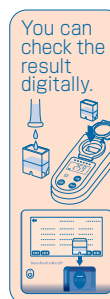
⑥ Press tube's side wall to expel air, and hold the tube.



⑦ Immerse the aperture of the tube into the Cell, pressing against the bottom, and release to take all the sample from the Cell into the tube. Shake the tube lightly for 10 times.



⑧ After 1min, compare the actual color in the tube with provided Standard Color.



How to Read the Test

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 indicates the value between the them.

Handling of PACKTEST Before and After Use

First Aid **Eye contact** → Immediately flush eyes with plenty of water.

Skin contact → Immediately flush contacted area with water.

Ingestion → Immediately rinse mouth.

If ingesting the content, or any symptom appears, seek medical advice immediately. Especially when ingesting the reagent, drink plenty of water or milk, then get medical attention 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 a manner consistent with Federal, State, and Local Regulations. Otherwise, the tube and bottle can be disposed as combustible waste.


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PACKTEST Zinc (Low Range)

Feature

This product utilizes 5-Br-PAPS method. It allows to measure zinc ion in tap water, environmental water, and other samples, easily and rapidly.

Caution

1. This product measures only the dissolved zinc (divalent) in the sample. To measure the sample including precipitated or chelated zinc ion, please dissolve prior to the measurement.
2. The optimum pH upon reaction will be around 9. If the pH of the sample exceeds 5–10, it needs to be neutralized with diluted sulfuric acid or diluted sodium hydroxide solution prior to use.
3. When concentration value of zinc standard solution is 1000mg/L, the color will turn about the same as “2mg/L” or more. If the concentration value is expected to be very high, please dilute the sample prior to measurement.
4. Tap water could contain trace amount of zinc. Please wash apparatus thoroughly with pure water.
5. At step ④, please keep the cap open, or the content may leak out while leaving it stand for 5min.
6. Ensure that the PACKTEST tube is filled up to half.
7. Keep temperature of the sample between 15–30°C.
8. Please use measuring pipette instead of provided plastic pipette for better accuracy.
9. When you see the orange granule remain inside the tube, please shake the tube again to make sure it is completely dissolved before comparing the color.
10. When comparing to the Standard Color, please be sure to read under the daylight or equivalent light source. It may be difficult to determine the closest color under the direct sunlight, certain florescent lights, mercury lamp, or LED.
11. You can put the line back into the tube 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 acceptable level by adding each of the single substances to the standard solution.

- ≤1000mg/L : B(III), Ba²⁺, Ca²⁺, Cl⁻, F⁻, I⁻, K⁺, Mg²⁺, Mo(VI), Na⁺, NH₄⁺, NO₂⁻, NO₃⁻, PO₄³⁻, SO₄²⁻, Anionic Surfactant, Phenol
- ≤100mg/L : Residual Chlorine
- ≤50mg/L : Ag⁺, Cr³⁺
- ≤20mg/L : CN⁻, Cu²⁺
- ≤10mg/L : Al³⁺, Cr(VI)
- ≤1mg/L : Co²⁺, Fe²⁺, Fe³⁺, Mn²⁺, Ni²⁺

Seawater does not affect the result.

Digital Water Analyzer

If you prefer more detailed result in digital notation, please use with DIGITALPACKTEST Zinc (Low Range) (Model: DPM-ZnD) or DIGITAL PACKTEST·MULTI SP (Model: DPM-MTSP). When measuring with analyzer, the measuring range, reaction time, and interference information are different from PACKTEST (visual colorimetry).

Please refer to instruction manual for further information or contact us for more details.

[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 breathe 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, cool, and dark place.
- <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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