

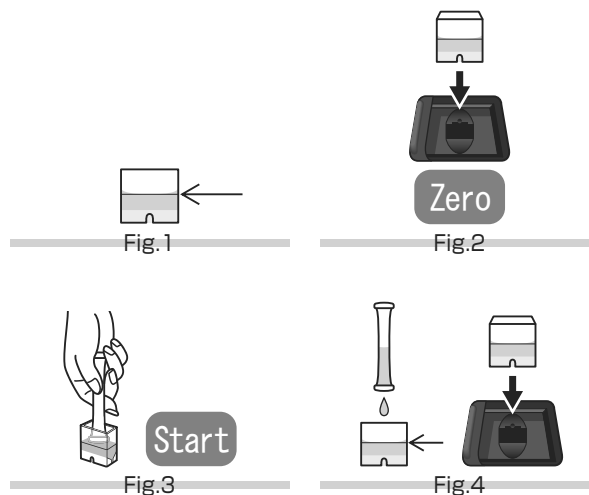
H₂O₂ Hydrogen Peroxide

Color development: None → Light purple → Purple
Method : 4-Aminoantipyrine with enzyme
Range : 0.10 — 2.50 mg/L(ppm)
Reagent : WAK-H₂O₂ Tube
Reaction time : 2 min. after drawing sample into the tube.

Cell : PACKTEST Square Cup
Wavelength : 539 nm, 590 nm

Procedure

1. Press **[H₂O₂]**.
2. Press **[OK]** to switch to the photometry window.
3. Fill the Cell with the sample for 1.5 mL (up to line). (Fig.1)
4. Put the Cell in the cell box and press **[Zero]**. (Fig.2)
5. Suck the whole amount of the sample in the Cell into the tube and press **[Start]** at the same time. (Fig.3)
6. Lightly shake the tube in Step 5 from 5 to 6 times, return the solution in the tube to the Cell in a gentle manner, set it again in the cell box. (Fig.4)
7. After 2 minutes have elapsed, the concentration will be automatically displayed.



CAUTION

1. The optimum pH during color development is 7. If the pH of the sample is not within the range from 6 to 9, neutralize the sample with dilute sulfuric acid or dilute sodium hydroxide solution, etc.
2. Perform measurement with the sample temperature set to 15 to 30°C.
3. If the concentration of hydrogen peroxide in the sample is 25 mg/L or less, the result is displayed as "OVER". However, note that if the concentration is 50 mg/L or higher, the color development becomes pale, and a result may be obtained from a sample exceeding the measurement range.

Influence of coexisting substance

The stored calibration curve has been created by using the standard solution. If the influence of other substance is considered, check the measurement value by comparing it with the official method or by standard addition method. The right chart is the list of interference data for acceptable level by adding each of the single substances to the standard solution.

Seawater does not affect the measurement.

Reductive substances such as Fe²⁺ and NO₂⁻ consume hydrogen peroxide.

Oxidizing substances such as residual chlorine and ozone cause a positive measurement error.

≤ 1000mg/L.: Ag⁺, B (III), Ba²⁺, Ca²⁺, Cl⁻, I⁻, K⁺, Mg²⁺, Na⁺, NH₄⁺, Ni²⁺, NO₃⁻, PO₄³⁻, SO₄²⁻, Zn²⁺
≤ 500mg/L.: F⁻, Fe³⁺, NO₂⁻
≤ 250mg/L.: Phenol
≤ 50mg/L.: Cr³⁺, Cr (VI), Cu²⁺, Anionic Surfactant
≤ 20mg/L.: Al³⁺, Co²⁺, Mn²⁺
≤ 2mg/L.: Mo (VI)
≤ 1mg/L.: CN⁻
< 1mg/L.: Fe²⁺, Residual Chlorine

Information on reagent

Refer to the usage that comes with PACKTEST.
The pH of the solution is about 7.