



KYORITSU

PACKTEST INSTRUCTIONS

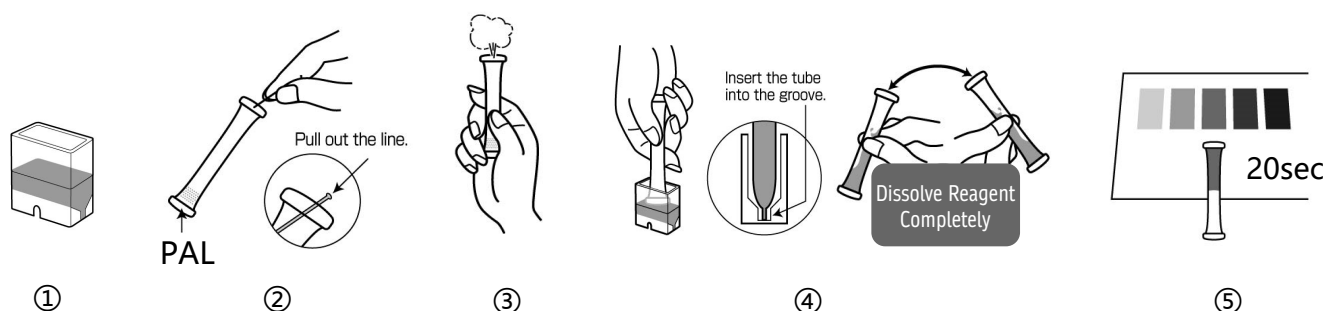
P-Alkalinity

Model: WAK-PAL

Visual Colorimetric Method with pH Indicator for Buffering Capacity

Main Reagent: Metacresol Purple (MCP)
 Measuring Range: CaCO_3 0 - 600 mg/L (ppm)

How to Use



- ① Take sample into Cell (PACKTEST Square Cup) up to line (1.5mL).
- ② Remove the colored line at the top of the tube to clear the aperture.
- ③ Press the tube's side wall to expel air and hold the tube.
- ④ Immerse the aperture of the tube into the Cup, press it to the bottom, release the finger and draw entire amount into the tube. Invert the tube back and forth lightly for 15 times to dissolve the reagent completely.
- ⑤ Compare the actual color in the tube with Standard Color after 20 sec.

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.

Handling of PACKTEST Before and After Use

First Aid

Eye Contact → Immediately flush eyes with plenty of water.

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.



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PACKTEST P-Alkalinity

Caution

1. This product allows to measure P-alkalinity (some of the substances that consume the acid, such as OH^- , CO_3^{2-} and others) in the sample.
2. Unclean container used to collect sample or stains on hands may affect the result. Please use clean container and wash hands thoroughly prior to measure.
3. PACKTEST Square Cup is reusable. To prevent contamination, wash thoroughly with pure water before and after use, or wash thoroughly with sample before use.
4. pH8. 3 or less will be P-alkalinity = 0 by definition. Sample with strong acidity may develop reddish to orange color.
5. Keep the sample temperature between 15-40°C.
6. Ensure that the PACKTEST tube is filled up to half. **Larger or smaller sample volume will imply higher or lower value, respectively.** Using measuring pipette will provide better accuracy.
7. 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.
8. You can put the line back into the aperture to seal. This will avoid possibility of spilling the content of the tube.

Unit Conversion

The measured value indicated with this product is described as Calcium Carbonate equivalent (CaCO_3 mg/L). When converting to equivalent concentration (normality, units: meq/L), conversion can be performed by the following formula.

$$\text{Equivalent Concentration (meq/L)} = \text{Measured Value (CaCO}_3 \text{ mg/L)} \times 0.020$$

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 a color development when adding each of the single substance to the standard solution.

$\leq 1000 \text{ mg/L}$	will not affect	... Ba^{2+} , Br^- , Ca^{2+} , Cl^- , HCO_3^- , F^- , I^- , K^+ , Mg^{2+} , Na^+ , NO_2^- , NO_3^- , HPO_4^{2-} , SO_4^{2-} , Glucose, Phenol, Anionic Surfactant
$\leq 500 \text{ mg/L}$	"	... Nonionic Surfactant
$\leq 20 \text{ mg/L}$	"	... Cationic Surfactant
$\leq 1 \text{ mg/L}$	"	... Residual Chlorine

Seawater does not affect the result.

Ethanol below 5% (w/w) will not interfere.

【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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