



# Chloride (200)

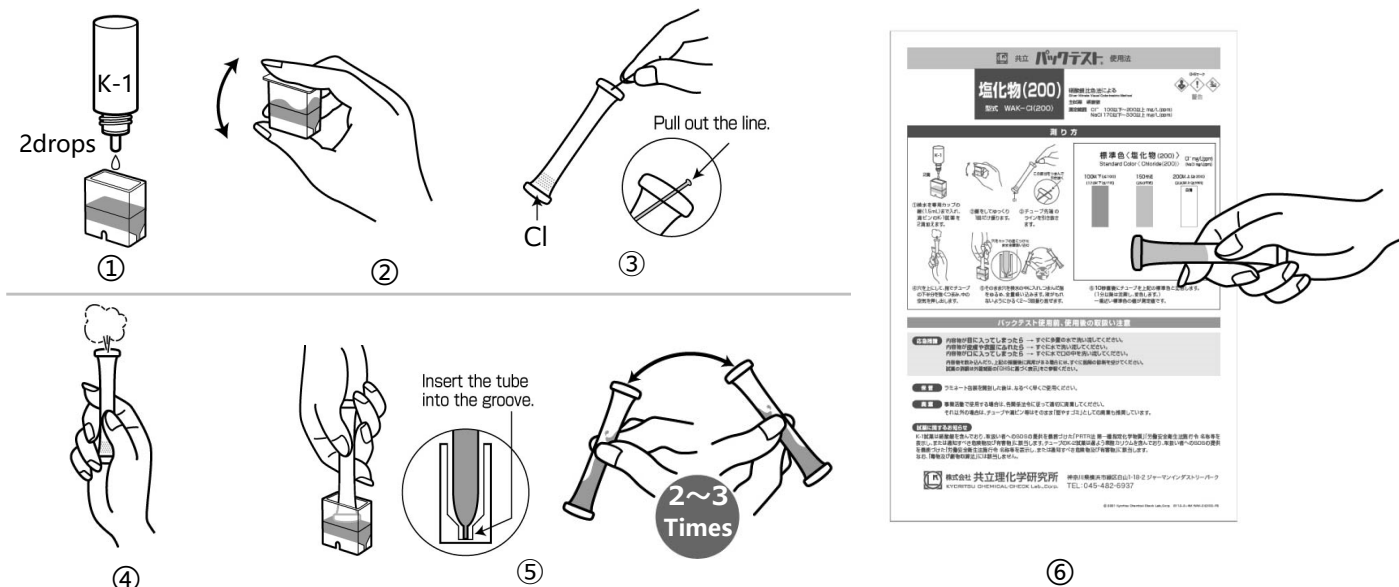
Model: WAK-Cl(200)

## Silver Nitrate Visual Colorimetric Method

Main Reagent: Silver Nitrate

Measuring Range: Cl<sup>-</sup> ≤100 - ≥200 mg/L (ppm)  
NaCl ≤170 - ≥330 mg/L (ppm)

### How to Use



- Fill the Cell (PACKTEST Square Cup) up to the line (1.5mL) with sample and add 2 drops of K-1 Reagent (Bottle).
- Close the cap and shake the Cell for one time.
- Remove the colored line at the top of the tube to clear the aperture.
- Press the tube's side wall to expel the air and hold the tube.
- Immerse the aperture of the tube into the Cell, pressing it against the bottom, and release finger to take all the sample from the Cell into the tube. Invert the tube back and forth lightly for 2 to 3 times.
- At 10sec, place the tube on **Standard Color printed on the Japanese instruction manual** to compare the color. (leaving it more than 1 min, precipitation settles and change color.) The nearest color indicates the measured value.)

### 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

After opening the laminated package and use them as soon as possible.

#### 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 Chloride (200)

### Caution

1. This product only measures chloride ion ( $\text{Cl}^-$ ) in the sample.  
Use the following products to measure chlorine for disinfection in tap water (residual chlorine derived from chemicals, like sodium hypochlorite)  
Residual Chlorine (Free) PACKTEST Model: WAK-CIO-DP  
Residual Chlorine (High Range) PACKTEST Model: WAK-CIO (C)
2. The optimum pH upon reaction will be around 7. If the pH of the sample exceeds 6-9, please neutralize with dilute sodium hydroxide solution or dilute sulfuric acid prior to measurement.
3. A 1000mg/L chloride ion standard solution develops the same color as  $\geq 200$  on Standard Color. When the value is expected to be high, please dilute the sample prior to use.
4. Keep the sample temperature between 15-30°C. If the sample temperature is low, it requires longer reaction time.
5. When adding K-1 solution, turn the bottle upside down vertically and slowly drop one at a time for total of 2 drops. If adding 2 drops continuously or dripping does not work properly, discard the sample, wash the Cell and start from beginning.
6. Ensure that the PACKTEST tube is filled up to the half.
7. Even the reagent is not completely dissolved, it will not affect the reading.
8. When exposed to sunlight, reacted solution inside the tube discolors to gray regardless of presence of chloride. Please be sure to use indoor.
9. Be sure to wash Cell (PACKTEST Square Cup) after the measurement.
10. 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 a color development when adding each of the single substances to the standard solution.

$\leq 1000\text{mg/L}$	will not affect	...	$\text{Ag}^+$ , B(III), $\text{Ca}^{2+}$ , $\text{F}^-$ , $\text{K}^+$ , $\text{Na}^+$ , $\text{NH}_4^+$ , $\text{NO}_2^-$ , $\text{NO}_3^-$ , $\text{PO}_4^{3-}$ , $\text{SO}_4^{2-}$ , Anionic Surfactant, Phenol, Formaldehyde
$\leq 100\text{mg/L}$	"	...	$\text{Zn}^{2+}$ , Sulfite ion
$\leq 10\text{mg/L}$	"	...	Cr(VI), $\text{I}^-$ , Thiosulfate ion
$\leq 5\text{mg/L}$	"	...	Mo(VI)

Seawater contains a large amount of chloride ions.  
Reducing substances may affect the result.

If ions like bromide ions, iodide ions, cyanide ions, etc. coexist, color develops to similar to chloride ion to cause positive false reading.

Sulfite ions, thiosulfate ions and sulfide ions also interfere, so use hydrogen peroxide to oxidize prior to use.

## **【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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