



KYORITSU

**PACKTEST**  
ION SELECTIVE

INSTRUCTIONS

# Chloride (Low Range)

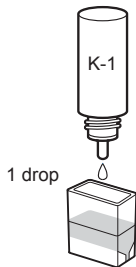
Model WAK-Cl (D)



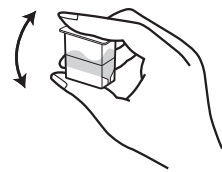
Harmful

By Silver nitrate color comparison Method  
Main reagent: Silver nitrateRange: Cl<sup>-</sup> 0 - ≥50 mg/L (ppm)

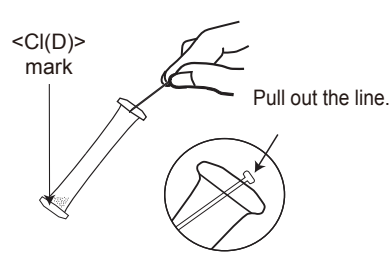
## How to use



(1) Fill the Cell (PACKTEST Square Cup) up to the first line (1.5 ml) with sample. Add 1 drop (~0.04mL) of K-1 reagent.



(2) Put on the cap and shake the Cell a few times.

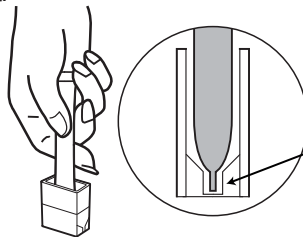


(3) Remove the line to clear the aperture from the top of the tube.



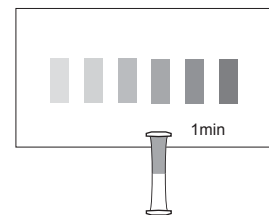
(4) Press the sides of the tube to expel approximately half of volume. Maintain pressed.

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



insert the PACKTEST in the groove, as shown.

(6) After 1 minutes, shake lightly, then 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 out of the reach of children.

Keep PACKTEST in a cool, dry and dark place. Especially, K-1 reagent and PACKTEST should be avoided strong light.

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

Use a package as soon as possible after opening.

The PACKTEST tube must not be opened before and after use.

## First Aid Measures

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.

**KYORITSU CHEMICAL-CHECK Lab., Corp.**37-11, DEN-ENCHOFU 5 CHOME, OHTA-KU, TOKYO 145-0071 JAPAN  
FAX: 81-3-3721-0666 <http://kyoritsu-lab.co.jp>

## PACKTEST Chloride (Low Range)

### Features

The Chloride(Low range) PACKTEST uses the Silver nitrate color comparison method. It allows to measure easily chloride concentration from various sample water, for example industrial wastewater and environmental water.

### Cautions

1. The Chloride (Low range) PACKTEST allows to measure chloride ion ( $\text{Cl}^-$ ).
2. If the chloride concentration is higher than 50 mg/L, a precipitate will occur. Please, shake the tube lightly before comparing the reaction color.
3. If the chloride concentration is higher than 150 mg/L, the precipitate will be white. If the chloride concentration is approximately higher than 500-1000 mg/L, the precipitate will be more important and may lighten the reaction color. Please, take care to this point if concentration is higher than 1000 mg/L. If you expect a high concentration of chloride, dilute the sample water before the measurement with distilled water. Usually, chloride concentration of river water or tap water is 20 - 50 mg/L .
4. To measure chlorine for water disinfection (Residual chlorine from sodium hypochlorite and so on), we recommend to use the following products:
  - Residual chlorine (Free) PACKTEST, ref: WAK-CIO·DP
  - Residual chlorine (High range) PACKTEST, ref: WAK-CIO (C)
5. The normal pH range is 6 - 10. If necessary, adjust the pH with diluted sulfuric acid or sodium hydroxide solution.
6. Ensure that PACKTEST tube is filled up to the half.
7. Partially undissolved reagent will not affect the measurement.
8. Keep sample temperature in the range 15°C - 30°C. Lower temperature necessitates longer reaction time.
9. Read the test under a daylight type lamp.
10. Put the line back into the aperture after use to prevent reagent spilt.

### Interferences

The standard colors of the chart were determined from developed colors with standard solutions. Bromide ion, iodide ion, cyanide ion and phosphate ion react with the reagent, inducing a color development.

Sulfite ion, thiosulfate ion, sulfide ion can interfere in the same way. These sulphur compounds can be oxidized with hydrogen peroxide.

Because of the high chloride concentration, the Chloride (Low range) PACKTEST is not suitable for seawater samples.