KYORITSU **PACKTEST** INSTRUCTIONS

Aluminum

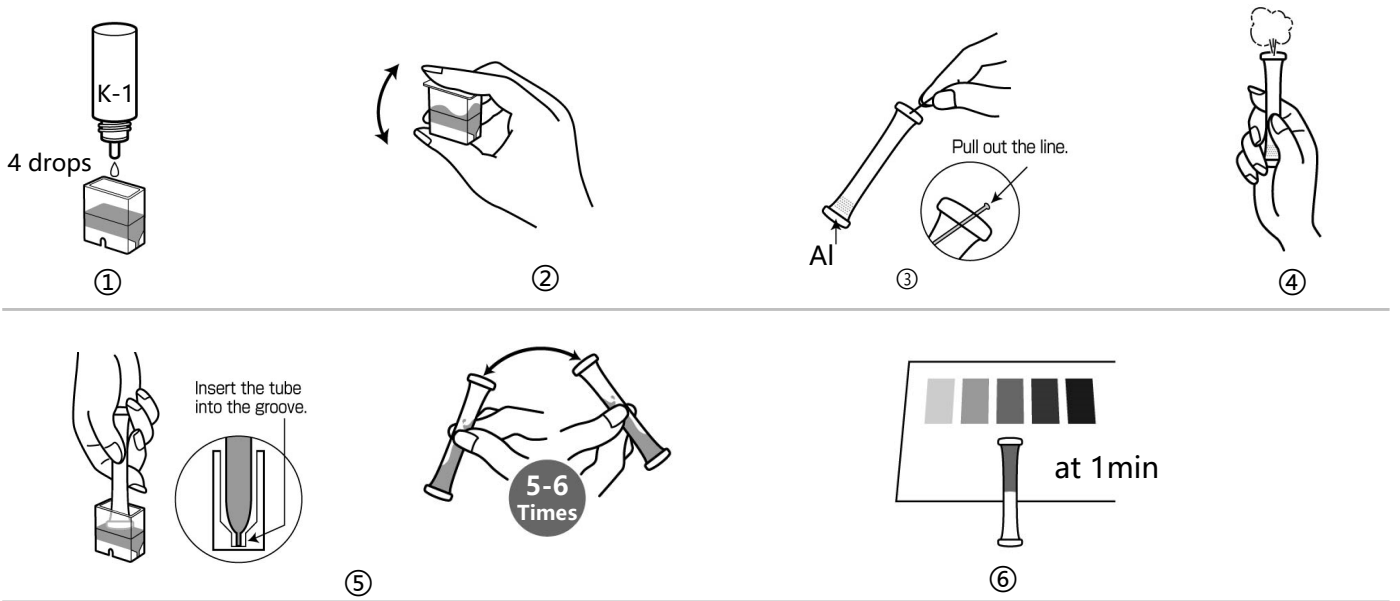
ECR Visual Colorimetric Method

Model: WAK-Al

Main Reagent: Eriochrome Cyanine R

Measuring Range: Al 0 - 1 mg/L (ppm)

How to Use



① Fill the Cell (PACKTEST Square Cup) up to the line (1.5mL) with sample and add 4 drops of K-1 Reagent (Bottle).

② Close the cap and shake the Cell for 2 to 3 times.

③ Remove the colored line at the top of the tube to clear the aperture.

④ Press the tube's side wall to expel the air and hold the tube.

⑤ Immerse the aperture of the tube into the sample, release the finger to fill the tube halfway. Invert the tube back and forth lightly for 5 to 6 times.

⑥ Compare the actual color in the tube with Standard Color at 1 min.

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.

KYORITSU CHEMICAL-CHECK Lab.,Corp.

1-18-2 Hakusan, Midori-ku, Yokohama, Kanagawa 226-0006, Japan

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

Keep unused PACKTEST tubes in the provided preserving bag after opening the laminated package and use them as soon as possible. Depending on the storage condition, the reagent may deteriorate in several days especially under the hot and humid weather.

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 Aluminum

Caution

1. With this method, only dissolved aluminum ion (Al^{3+}) in the sample can be measured. Dissolved state of aluminum varies greatly depending on pH level, and it also exist in suspension or precipitate state in the water. Please perform pretreatment prior to measurement according to the purpose.
2. The optimum pH upon reaction will be around 6. If the pH of the sample exceeds 5-9, please neutralize with dilute sodium hydroxide solution or dilute sulfuric acid prior to measurement. Sample water with low buffering can be measured even around pH 2.
3. The 1000mg/L aluminum standard solution develops a stronger color than the standard color 1. When the value is expected to be high, please dilute the sample prior to use.
4. Ensure that the PACKTEST tube is filled up to half. Larger or smaller sample volume will imply higher or lower value, respectively.
5. Compare the color immediately at 1 minute. It may become darker over time.
6. Partially undissolved reagent will not affect the measurement.
7. Keep the sample temperature between 15-40℃. If the sample temperature is low, it requires longer reaction time.
8. 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.
9. You can put the line back into the aperture 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 on color development when adding each of the single substances to the standard solution.

≤1000mg/L	will not affect	… B(III), Ba^{2+}, Cd^{2+}, Cl^-, I^-, K^+, Mn^{2+}, Na^+, NH_4^+, NO_2^-, NO_3^-, SO_4^{2-}, Residual Chlorine, Phenol
≤200mg/L	〃	… CN^-
≤100mg/L	〃	… Ca^{2+}, Co^{2+}
≤50mg/L	〃	… As(III)
≤20mg/L	〃	… Mg^{2+}, Ni^{2+}, Pb^{2+}
≤10mg/L	〃	… Mo(VI), Zn^{2+}
Any Level	will affect	… Cr^{3+}, Cr(VI), Cu^{2+},F^-, Fe^{2+}, Fe^{3+}, PO_4^{3-}, Sn^{2+}

Sea water cannot be measured.

【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.

KYORITSU CHEMICAL-CHECK Lab.,Corp.
1-18-2 Hakusan, Midori-ku, Yokohama, Kanagawa
226-0006, JAPAN E-mail:eng@kyoritsu-lab.co.jp