



KYORITSU PACKTEST INSTRUCTIONS

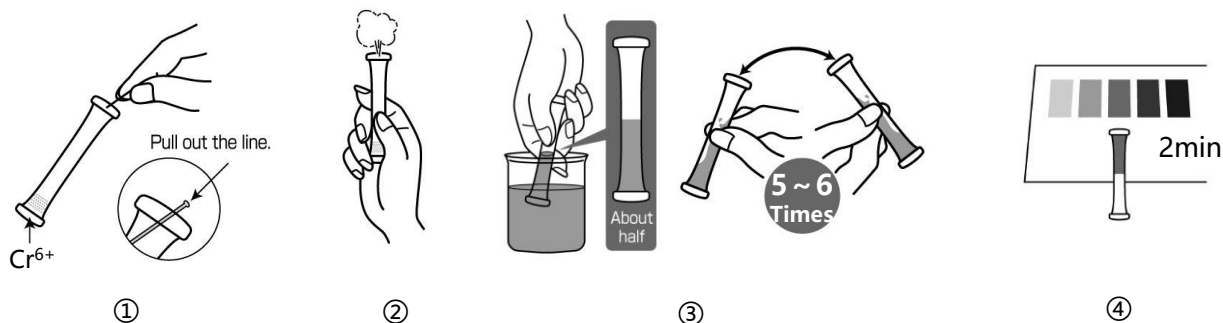
Chromium (Hexavalent)

Diphenylcarbazide Visual Colorimetric Method

Measuring Range: 0.05 - 2 mg/L (ppm)

Model: WAK-Cr6

How to Use



- ① Remove the colored line at the top of the tube to clear the aperture.
- ② Press the tube's side wall to expel air and hold the tube.
- ③ Immerse the aperture of the tube into the sample, release the finger to fill up the tube halfway. Invert the tube back and forth lightly for 5-6 times.
- ④ After 2min, place the tube on the provided Color Sheet as shown to compare the color.

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

The content of the tube is **Strong Acid**. Hazardous when contacting with eyes.

First Aid

Eye Contact → Immediately flush eyes with water for at least 15 minutes, followed by consult with Ophthalmologist, even without any symptom.

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.

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Caution

1. The optimum pH upon reaction will be below 2. If the pH of the sample exceeds 9, please bring pH below 7 using dilute sulfuric acid prior to measurement. Please pay extra attention to samples with high pH, like drainage of ready-mixed concrete industry.
2. A chromium standard solution of 200 mg/L develops a color stronger than "2" on the Standard Color. If the concentration is higher, the color fades then becomes orange at 1000mg/L. When the value is expected to be high, please dilute the sample prior to use.
3. Keep the sample temperature between 15-30°C. If the sample temperature is low, it requires longer reaction time.
4. Ensure that the PACKTEST tube is filled up to half.
5. Partially undissolved reagent will not affect the measurement.
6. 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.
7. 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 a color development when adding each of the single substances to the standard solution.

≤1000mg/L	will not affect	... Al ³⁺ , B(III), Ba ²⁺ , Ca ²⁺ , Cd ²⁺ , Cl ⁻ , CN ⁻ , F ⁻ , I ⁻ , K ⁺ , Mg ²⁺ , Mn ²⁺ , Na ⁺ , NH ₄ ⁺ , NO ₃ ⁻ , Pb ²⁺ , PO ₄ ³⁻ , Sn ²⁺ , SO ₄ ²⁻ , Zn ²⁺ , Phenol
≤500mg/L	"	... Co ²⁺ , Ni ²⁺
≤50mg/L	"	... NO ₂ ⁻
≤30mg/L	"	... Mo(VI)
≤10mg/L	"	... Cu ²⁺
≤5mg/L	"	... V(V), Residual Chlorine
≤3mg/L	"	... Fe ³⁺

Seawater does not affect the result.

If reducing substances like sodium bisulfite, As³⁺, Fe²⁺, coexist in the sample, reduction from Cr⁶⁺ to Cr³⁺ may occur and result in inaccurate measurement. In this case, please use pretreatment reagent (model: Cr-RA) and measure as total chromium (Cr⁶⁺+Cr³⁺) or use PACKTEST Total Chromium (model: WAK-Cr-T) to measure.