KYORITSU **PACKTEST** INSTRUCTIONS

Silica

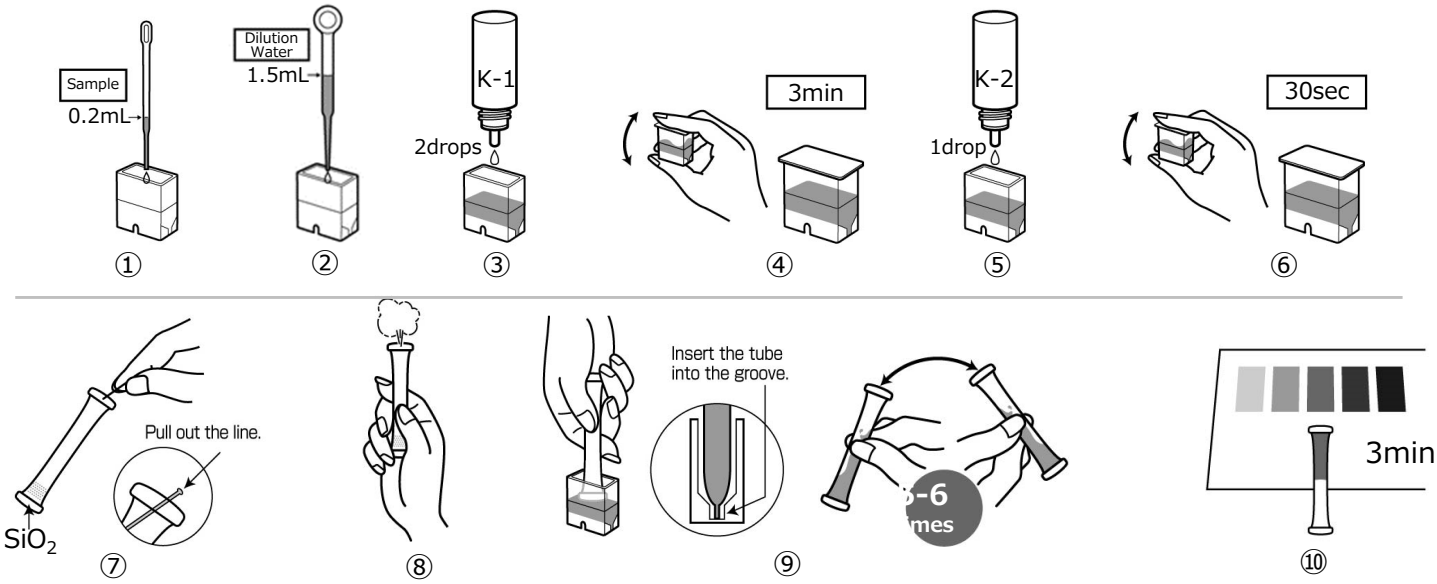
Molybdenum Blue Visual Colorimetric Method

Main Reagent: Molybdate、Ascorbic Acid

Model : WAK-SiO_2

Measuring Range: 5 - 200 mg/L(ppm)

How to Use



① Take 0.2mL of the sample into Cell (PACKTEST Square Cup) with Small Pipette.

② Add 1.5mL of Dilution Water with Large Pipette.

③ Add 2 drops of K-1 Reagent (Bottle).

④ Close the cap and shake the Cell for 2 to 3 times, and wait for 3 min.

⑤ Add 1 drop of K-2 Reagent (Bottle).

⑥ Close the cap and shake the Cell for 2 to 3 times, and wait for 30 sec.

⑦ Remove the colored line at the top of the tube to clear the aperture.

⑧ Press the tube's side wall to expel the air and hold the tube.

⑨ 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.

⑩ Compare the actual color in the tube with Standard Color after 3 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.

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Handling of PACKTEST Before and After Use

K-1 Reagent, K-2 Reagent and content of the tube is **Strong Acid**.

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.

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 Silica

Caution

1. This product only allows to measure Silicate ion (SiO_3^{2-}) in the sample. To measure dissolved, colloidal and total silica, operate necessary pretreatment prior to measurement.
2. The optimum pH upon reaction will be around 2. If the pH of the sample exceeds 2-9, please neutralize with dilute sodium hydroxide solution or dilute sulfuric acid prior to measurement.
3. A Silica standard solution of 1000mg/mL develops a color stronger than 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 15-40℃.
5. Please rinse the Small Pipette with pure water or same sample for measurement prior to use.
6. Please use measuring pipette instead of provided plastic pipette for better accuracy.
7. Ensure that the PACKTEST tube is filled up to half.
8. Partially undissolved reagent will not affect the measurement.
9. 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.
10. 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.

≤5000mg/L	will not affect	⋯ Al^{3+}, B(III), Ba^{2+}, Ca^{2+}, Cl^-, CN^-, Fe^{2+}, I^-, K^+, Mg^{2+}, Mn^{2+}, Mo(VI), Na^+, NH_4^+, NO_3^-, SO_4^{2-}, Zn^{2+}, Anionic Surfactant, Residual Chlorine, Phenol, Formaldehyde
≤1000mg/L	〃	⋯ As(III), Co^{2+}, Cr(VI), Cu^{2+}, F^-, Fe^{3+}, Ni^{2+}, NO_2^-
≤200mg/L	〃	⋯ PO_4^{3-}
≤100mg/L	〃	⋯ Cr^{3+}
≤50mg/L	〃	⋯ V(V)

Seawater does not affect the result.

Oxidizing substances and reducing substances may affect the result.

【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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