



KYORITSU

PACKTEST
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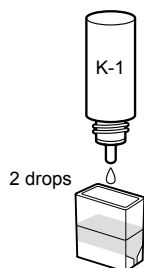
INSTRUCTIONS

Chlorine Dioxide

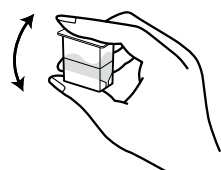
Model WAK-ClO₂

DPD color comparison Method with Glycine
 Main reagent: Glycine and N,N-diethyl-*p*-phenylenediamine sulfate
 Range: 0.2 - 10 mg ClO₂ /L (ppm)

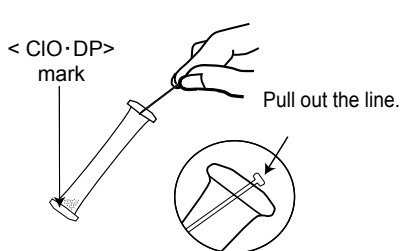
How to use



(1) Fill the Cell (PACKTEST Square Cup) up to the first line (1.5 ml) with sample. Add 2 drops (~0.13mL) of K-1 reagent.



(2) Put on the cap and shake the Cell 2-3 times.

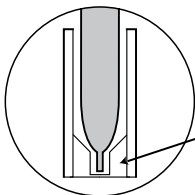


(3) Remove the line to clear the aperture from the top of the tube.



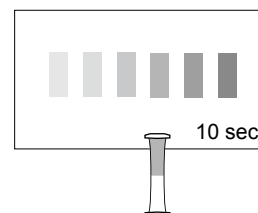
(4) Press the sides of the tube to expel approximately half of volume. Maintain pressed.

(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 10 seconds, 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 in a cool, dry and dark place.

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

Use a package as soon as possible after opening.

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.**

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PACKTEST Chlorine Dioxide

Features

The Chlorine Dioxide PACKTEST uses the N,N-diethyl-*p*-phenylenediamine sulfate color comparison method. It is suitable for city water, swimming pool water and drinking water.

Cautions

1. Beyond 10 seconds, the reaction color could become stronger because of combined hypochlorite and chlorite acid.
2. For high chlorine dioxide concentration (≈ 200 mg/L), PACKTEST color becomes stronger. Beyond, the color becomes lighter and over about 600 mg/L, it becomes colorless.
3. The normal pH range is 3 -10. If necessary, adjust the pH with diluted sulfuric acid or sodium hydroxide solution.
4. If residual chlorine is present, the K-1 reagent must be used. Otherwise, the color will become stronger. If residual chlorine is not present, K-1 reagent is not needed.
5. Keep sample temperature in the range 15 - 40°C, higher temperature implies shorter reaction time.
6. Ensure that PACKTEST tube is filled up to the half.
7. Partially undissolved reagent will not affect the measurement.
8. Read the test under daylight type lamp.
9. Put back the line into the aperture after using to prevent reagent spilt.

Interferences

Standard colors were determined from standard solutions. However, coexisting substances will cause inaccurate results. The list below reports substances concentrations under which ones interferences are insignificant:

≤ 1000 mg/L : Ca^{2+} , Cl^- , F^- , I^- , K^+ , Mg^{2+} , Mn^{2+} , Na^+ , NH_4^+ , NO_3^- , SO_4^{2-} , Zn^{2+} , Chlorite acid and Hypochlorate.

≤ 500 mg/L : PO_4^{3-}

≤ 250 mg/L : Al^{3+} , Ni^{2+}

≤ 10 mg/L : Cu^{2+} , Phenol

≤ 5 mg/L : Chlorine

CN^- , Fe^{2+} , NO_2^- and other reductive substances can interfere by consumption.

Cr^{6+} , Fe^{3+} and other oxidizing chemical can react with the main reagent and induce a colouring.

The Chlorine dioxide PACKTEST is suitable for sea water samples.