NO_2-N-C　Nitrite-Nitrogen (High Range)

Color development：None → Light yellow → Reddish brown
Method　　：Griess Romijin
Range　　：1.0 — 30.0 mg/L(ppm)
Reagent　　：WAK-NO_2（C）　Tube
Reaction time ：5 min. after drawing sample into the tube.

Cell：PACKTEST Square Cup
Wavelength：560 nm

Procedure

1. Press【NO_2-N-C】.
2. Press【OK】to switch to the photometry window.
3. Fill the Cell with the sample for 1.5 mL (up to line).（Fig.1）
4. Put the Cell in the cell box and press【Zero】.（Fig.2）
5. Suck the whole amount of the sample in the Cell into the tube and press【Start】at the same time.（Fig.3）
6. Lightly shake the tube in Step 5 from 5 to 6 times, and then wait for reaction for about 4 minutes.（Fig.4）
7. Gently return the solution in the tube to the Cell when the time count down reaches under 1 minute, set it again in the cell box.（Fig.5）
8. After 5 minutes have elapsed, the concentration will be automatically displayed.

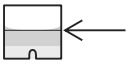
Fig.1

Fig.2

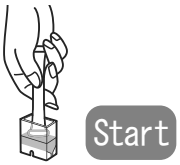

Fig.3

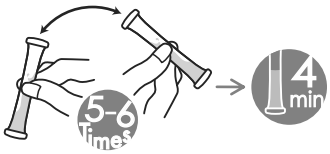

Fig.4

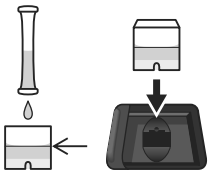
Fig.5

CAUTION

1. The optimum pH during color development is 3. If the pH of the sample is not within the range from 2 to 9, neutralize the sample with dilute sulfuric acid or dilute sodium hydroxide solution, etc.
2. Perform measurement with the sample temperature set to 15 to 30℃.
3. Note that in this PACKTEST, a large amount of bubbles will be generated. If bubbles are attached to the inner wall of the Cell, remove them as much as possible by, for example, snapping the Cell with your finger.

Influence of coexisting substance

The stored calibration curve has been created by using the standard solution. If the influence of other substance is considered, check the measurement value by comparing it with the official method or by standard addition method.
The right chart is the list of interference data for acceptable level by adding each of the single substances to the standard solution.

Seawater does not affect the measurement.
Generally, nitrite ions do not coexist with oxidizing substances such as residual chlorine, but if residual chlorine and chloramines exist, they develop their color in red and may be mistaken as nitrite even when nitrite ions do not exist.

Except for Heavy metal ions:
≤ 100mg/L,: B（Ⅲ）, Ca^{2+}, Cl^-, F^-, I^-, K^+, Mg^{2+}, Na^+, NO_3^-, PO_4^{3-}, SO_4^{2-}, Anionic Surfactant, Phenol
≤ 50mg/L,: NH_4^+
≤ 5mg/L,: Residual Chlorine

Heavy metal ions:
≤ 10mg/L,: Al^{3+}, Ba^{2+}, CN^-, Co^{2+}, Cr^{3+}, Cu^{2+}, Fe^{2+}, Fe^{3+}, Mn^{2+}, Mo（Ⅵ）, Ni^{2+}, Zn^{2+}
≤ 1mg/L,: Cr（Ⅵ）

Information on reagent

Refer to the usage that comes with PACKTEST.
The pH of the solution is about 3.