

# FREE RESIDUAL CHLORINE



: Immersion method

HIGH CONC. INDICATOR (Pink)

#### 1. PERFORMANCE

1) Sampling	method
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(Refer to Page 17) 2) Measuring range : 0.4-5 ppm 3) Sampling time 3 minutes 4) Sample volume over 5 ml 5) Detectable limit 0.1 ppm 6) Shelf life 2 years  $0 \sim 40 \,^{\circ}{\rm C}$ 7) Operating temperature 8) Operating PH 2 - 109) Reading : Direct reading from the scale : White  $\rightarrow$  Purple 10) Colour change

## 2. RELATIVE STANDARD DEVIATION

RSD-low: 10% RSD-mid.: 10% RSD-high: 10%

#### **3. CHEMICAL REACTION**

By reacting with 3, 3'-Dimethylnaphthidine, Nitroso-compound is produced.

### 4. CALIBRATION OF THE TUBE

IODOMETRY METHOD

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Chloride ion		200	Lower readings are given.
Calcium ion			The accuracy of readings is not affected.
Copper ion			"
Iron ion	Similar stain is produced.	20	Higher readings are given.

(NOTE)

1. This tube is for measuring FREE-RESIDUAL CHLORINE, not for COMBINED-RESIDUAL CHLORINE.

- This tube is not suitable for measuring sea water or sample solution which includes sea water. Because it is affected by Chloride ion.
- 3. When the concentration is over full scale (5 ppm), the HIGH CONC. INDICATOR (Pink) is discoloured to White. In this case, dilute the sample solution and multiply the reading value obtained, by the dilution ratio.

## 6. SAMPLING METHOD

(Immersion method)

- 1) Cut both ends of a fresh detector tube with a file.
- 2) Immerse the filled end of the tube with white end plug into the prepared sample solution.Capillary action will occur immediately and the sample solution rise through the reagent. If Chloride ion is existed in the sample solution, a discolouration will be occurred in the detecting reagent layer from its inlet and the discoloured layer shall be given according to the concentration of Chloride ion.

