CHLORINE



1. PERFORMANCE

1) Measuring range 1-40 ppmNumber of pump strokes $1(100 \text{m} \ell)$

2) Sampling time : 2 minutes/1 pump stroke

3) Detectable limit : 0.3 ppm4) Shelf life : 2 years5) Operating temperature $: 0 \sim 40 \,^{\circ}\text{C}$

6) Reading : Direct reading from the scale calibrated by 1 pump stroke

7) Colour change : White→Yellowish orange

2. RELATIVE STANDARD DEVIATION

RSD-low: 10% RSD-mid.: 5% RSD-high: 5%

3. CHEMICAL REACTION

0-Toluidine is oxidized and Orthoquinone is produced.

$$CI_2 + H_2N - \bigcirc - \bigcirc - NH_2 \longrightarrow CINH_2 = \bigcirc = \bigcirc = NH_2CI$$

$$CH_3 \qquad CH_3 \qquad CH_3 \qquad CH_3$$

4. CALIBRATION OF THE TUBE

PERMEATION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Bromine	0.1	Similar stain is produced.	1	Higher readings are given.
Chlorine dioxide	0.3	"	1	"
Nitrogen dioxide		Pale yellow stain is produced.	Chlorine conc. X 1/2	The maximum end point of the stain is indiscernible and higher readings are given.