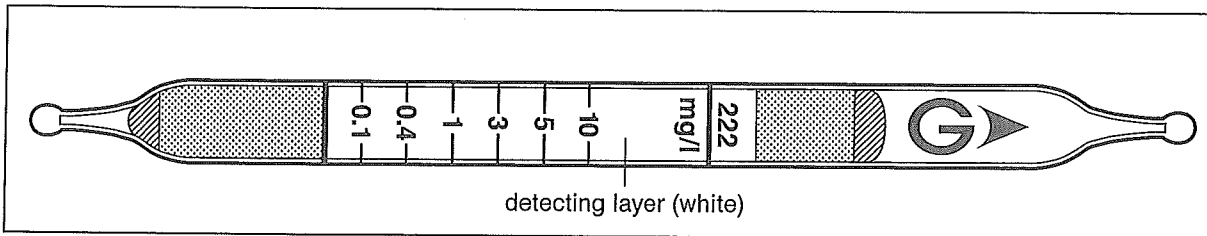


# Free Residual Chlorine $\text{ClO}^-$ No.222



## Performance

Measuring range :	0.1 – 10 mg/l
Sampling time :	4 minutes
Detecting limit :	0.05 mg/l
Colour change :	White → Reddish Orange
Corrections for water temperature :	Unnecessary (5 – 40°C)
pH value :	pH 4.0 – pH 10.0
Relative standard deviation :	15 % (for 0.1 to 1 mg/l) 10 % (for 1 to 10 mg/l)
Shelf life :	2 years

## Reaction principle

Free Chlorine + 3,3',5,5'-Tetramethylbezidine → Reddish Orange reaction product

## Possible coexisting substances and their interferences (NOTE : Page 2-5)

Substance	Concentration	Interference	Changes colour by itself to
$\text{NO}_2^-$	$\geq 0.3 \text{ mg/l}$	—	No
$\text{NH}_4^+$	$\geq 0.1 \text{ mg/l}$	—	No
$\text{Cl}^-$	$\geq 30 \text{ mg/l}$	—	No
$\text{NO}_3^-$	$\geq 50 \text{ mg/l}$	—	No
$\text{SO}_4^{2-}$	$\geq 30 \text{ mg/l}$	—	No
$\text{PO}_4^{3-}$	$\geq 20 \text{ mg/l}$	—	No

## Calibration method

Free Residual Chlorine solution