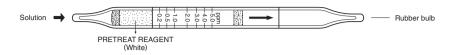
# **CYANIDE ION**



#### 1. PERFORMANCE

1) Sampling method : Direct sampling method (Refer to Page 17)

9) Reading : Direct reading from the scale

10) Colour change : White→Blue

## 2. RELATIVE STANDARD DEVIATION

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

#### 3. CHEMICAL REACTION

By reacting with o-Toluidine and Cupric sulphate (II), complex salt is produced.

#### 4. CALIBRATION OF THE TUBE

POTASSIUM CYANIDE STANDARD SOLUTION METHOD

### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Carbonate ion		1,700	Higher readings are given.
Chloride ion		100	"
Sulphate ion		2,700	Lower readings are given.
Thiocyanate ion	Similar stain is produced.	200	Higher readings are given.
Sulphide ion			"
Dichromate ion			Pretreat reagent is discoloured and the accuracy of readings is not affected.
Permanganate ion			"
Ferricyanate ion			"
Residual chloride ion			"

#### 6. SAMPLING METHOD

- 1) Make the sample solution at PH 6-13 before test.
- 2) Cut both ends of a fresh detector tube with a file.
- 3) Squeeze the rubber bulb (an extra option), insert the tube end (B) into it as it is and immerse filled end (A) of the tube.
- 4) Put the thumb off the rubber bulb, and the sample solution shall rise up.
- 5) When the sample solution rises up to (C) of the tube, remove the tube from the rubber bulb and from the sample solution.
- 6) The concentration can be obtained directly from the reading value of scale printed on the tube.
- 7) At concentration of over 5 ppm, dilute the sample solution and multiply the readings obtained by the dilution ratio.

