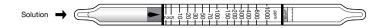
SULPHIDE ION



1. PERFORMANCE

1) Sampling method : Immersion method (Refer to Page 17)

2) Measuring range 2 - 1,000 ppm 3) Sampling time 3 - 3 minutes 4) Sample volume 3 - 3 minutes 5) Detectable limit 3 - 3 minutes 6) Shelf life 3 - 3 minutes 1 ppm 6) Shelf life 3 - 3 minutes 1 ppm

7) Operating temperature $5 \sim 60 \,^{\circ}\text{C}$ 8) Operating PH : 1-12

9) Reading : Direct reading from the scale

10) Colour change : White→Brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with Lead nitrate, Lead sulphide is produced.

 $S_2 + Pb(NO_3)_2 \rightarrow PbS$

4. CALIBRATION OF THE TUBE

SODIUM SULPHIDE STANDARD SOLUTION METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Dichromate ion		500	Lower readings are given.
Mercaptans ion			Similar stain is produced.
Sulphate ion		less than 1.5%	The accuracy of readings is not affected.
Iron ion		less than 0.2%	"
Chloride ion FIG.1		less than 2.5 %	"
Carbonic ion		less than 4.0 %	"

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 shall rise through the reagent. If Sulphide 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 Sulphide ion.

