



## INSTRUCTION MANUAL SULPHIDE ION DETECTOR TUBE

No.200SA

★ DO NOT DISCARD THIS INSTRUCTION MANUAL UNTIL ALL THE TUBES IN THIS BOX ARE USED UP.

### 1. PERFORMANCE:

Measuring Range and Sampling Time	: 2 - 1000ppm, Approx. 3 minutes
Colour Change	: White → Dark Brown
Detectable Limit	: 1ppm
Operating temperature	: 5 - 60 °C (41-140°F)

#### CAUTION

1. DETECTOR TUBE CONTAINS REAGENTS.
2. DO NOT TOUCH THESE REAGENTS DIRECTLY ONCE TUBES ARE BROKEN.
3. KEEP THE TUBES OUT OF THE REACH OF CHILDREN.

#### NOTICE

1. DO NOT USE THIS TUBE OUTSIDE THE STATED OPERATING TEMPERATURE RANGE.
2. STORE TUBES IN A COOL AND DARK PLACE (0-25 °C/32-77°F), AND USE BEFORE EXPIRATION DATE PRINTED ON TOP OF THE BOX.
3. PRIOR TO USE, READ CAREFULLY ITEM 7 "USER RESPONSIBILITY" .
4. READ THE CONCENTRATION IMMEDIATELY AFTER MEASUREMENT.

### 2. SAMPLING AND MEASUREMENT:

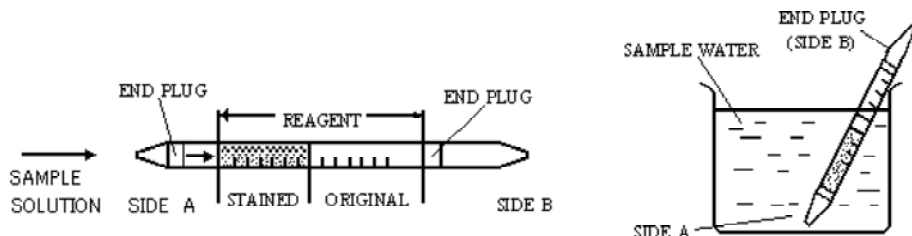


Fig.1

- ① Break both ends of detector tube.

**CAUTION SAFETY GLASSES AND GLOVES SHOULD BE WORN TO PREVENT INJURY FROM SPLINTERING GLASS.**

- ② Immerse the end of the tube with side A (Arrow mark) into the prepared sample solution. Capillary action occurs immediately and the sample rises through the reagent. Sulphide ion in the sample makes a brown stain.
- ③ When the sample rises up to the top end plug (side B), remove the tube from the sample.
- ④ On completion of sampling, read the scale at the maximum point of the stained layer.
- ⑤ When the concentration of sample solution is over the scale range (1000ppm at full scale), you can get true concentration in the way of the undermentioned procedure:
  - 1) Dilute the sample solution accurately with distilled water and measure the sample solution.
  - 2) Multiply its reading by dilution ratio.

**SPECIAL NOTE:** When the maximum point of the stained layer is unclear, read the scale at the centre between the longest and shortest points.

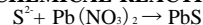
### 3. CORRECTION FOR AMBIENT CONDITIONS:

Temperature; No temperature correction is necessary at the temperature of 5 °C (41°F) to 60 °C (140°F).

### 4. INTERFERENCE:

Ethyl mercaptan or Methyl mercaptan in the sample solution produces a similar stain. Coexistence of more than 500ppm of Chromate ion with sulphide ion will give lower reading. Each coexistence of less than 1.5% of Sulphate ion, 0.2% of Iron ion, 2.5% of Chloride ion or 4% of Carbonic ion with Sulphide ion will not affect the readings. PH value within 1-12 does not affect the reading value.

### 5. CHEMICAL REACTION IN THE DETECTOR TUBE:



### 6. DISPOSAL OF TUBE:

**USED TUBES SHOULD BE DISPOSED CAREFULLY ACCORDING TO RELEVANT REGULATIONS, IF ANY.**

### 7. USER RESPONSIBILITY:

It is the sole responsibility of the user of to ensure that detector tubes are not used which are either beyond their expiration date or have a colour change different to that stated in the Performance specifications.

The Manufacturer and Manufacturer's Distributor shall not be otherwise liable for any incorrect measurement or any damages, whether damages result from negligence or otherwise.

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