

## INSTRUCTION MANUAL

No.205SL

*Kitagawa*

## SALINITY DETECTOR TUBES

- ★ READ CAREFULLY THIS INSTRUCTION MANUAL AND THE INSTRUCTIONS OF THE ASPIRATING PUMP PRIOR TO USING THIS PRODUCT.
- ★ DON'T DISCARD THIS INSTRUCTION MANUAL UNTIL ALL THE TUBES IN THIS BOX ARE USED UP.

### 1. PERFORMANCE:

Measuring Range	0.01 - 0.8 %
and Sampling Time:	(Apprx. 20 seconds)
Colour Change:	Brown → White
Detectable Limit:	0.002 %
Operating temperature:	0-40 °C (32-104°F) ( No corrections are necessary.)

#### • CAUTION

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

#### NOTICE

1. READ THE READING VALUE AFTER THE TEST. IF THE TUBE IS LEFT WET, THE PEELING OF THE SCALE PRINTED MAY BE OCCURED.
2. 10 PCS. OF A FILTER PAPER IS ATTACHED AS STANDARD ACCESSORIES. IN CASE THAT THE SAMPLE SOLUTION CONTAINS FINE MATERIAL AND THE CUT END OF THE TUBE IN THE SOLUTION MIGHT BE CLOSED WITH THE FINE MATERIAL, WRAP THE TUBE END WITH A FILTER PAPER BEFORE PUTTING INTO THE SOLUTION.

### 2. SAMPLING AND MEASUREMENT:

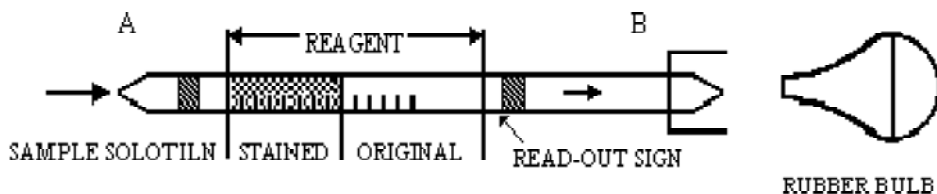


Fig.1

- ① Cut both tips of a new detector tube hand.

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

- ② Squeeze the rubber b (an extra option), insert the tube end (B) into it as it is and immerse filled end (A) of the tube.
- ③ Put the thumb off the rubber bulb, and the sample solution shall rise up. Salinity in the sample solution makes white stains.
- ④ When the sample solution rises up to the read-out sign which changes to white from light red (original colour), remove the tube from the sample solution.
- ⑤ The reading can be obtained directly from the scale printed on the detector tube.
- ⑥ At concentration above 0.8% dilute the sample solution and multiply the reading obtained by the dilution ratio.

#### SPECIAL NOTE:

When the top of the discoloured layer is made obliquely, read the concentration at the centre between the longest and the shortest points of the discoloured layer. The total stain length should be read, even if the stained layer gets multi-colour variations.

### 3. CORRECTION FOR AMBIENT CONDITIONS:

No temperature correction is necessary at the temperature of 5 °C (41°F) to 80 °C (176°F).

### 4. INTERFERENCES:

Coexistence of Bromine, Iodine or Cyanide ion will give higher readings. Sulphide ion produces brown stains and will give higher readings. Coexistence of less than 1000ppm of Sulphate, Nitrate or Iron ion respectively with salinity do not affect the reading value. PH value within 4 to 13 does not affect the reading value.

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



### 6. DISPOSAL OF TUBE:

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