

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

1. PERFORMANCE: PHOSPHINE & ARSINE are commonness.

Measuring Range	: 0.1 - 2.0 ppm (*)	0.05 - 1.0 ppm
and Sampling Time	: 1 minute	2 minutes

(*) Graduations on the detector tube are based on 1 pump stroke.

Number of pump strokes	: 1 (100mL)	2 (200mL)
Colour Change	: Pale Yellow → Pink	
Detectable Limit	: 0.02 ppm (2 pump strokes)	
Operating temperature	: 0 - 40 °C (32-104°F) (No correction is necessary.)	
Aspirating Pump	: Model AP-20, AP-20S, 400B, AP-1, AP-1S or 400A	

⚠ 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. USE ONLY PUMP MODELS AP-20, AP-20S, 400B, AP-1, AP-1S OR 400A. OTHERWISE, CONSIDERABLE ERROR IN INDICATION MAY OCCUR.
2. BEFORE TESTING, CHECK THE ASPIRATING PUMP FOR LEAKS (REFER TO ITEM 8. INSPECTION OF ASPIRATING PUMP). ANY PUMPS SHOWING SIGNS OF LEAKAGE SHOULD BE CORRECTED BEFORE USE.
3. DO NOT USE THIS TUBE OUTSIDE THE STATED OPERATING TEMPERATURE RANGE.
4. 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.
5. PRIOR TO USE, READ CAREFULLY ITEM 9. USER RESPONSIBILITY.
6. READ THE CONCENTRATION IMMEDIATELY AFTER MEASUREMENT.

2. SAMPLING AND MEASUREMENT:

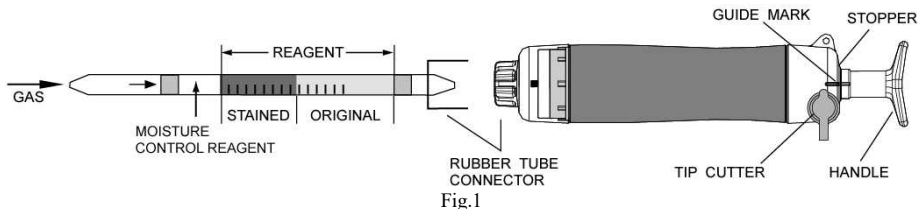


Fig.1

- ① Break both ends of detector tube.

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

- ② Insert the detector tube into aspirating pump securely as shown in Fig.1. (Arrow mark shall point to the pump.)
- ③ Align the guide marks on the shaft and stopper of the aspirating pump.
- ④ Pull the pump handle at full stroke until it locks and wait for 1 minute or until the completion of sampling is confirmed with the flow indicator of the pump (See descriptions about the flow indicator in the instructions of the pump).
- ⑤ On completion of sampling, read the scale at the maximum point of the stained layer.
- ⑥ In case of 2 pump strokes, push the handle once more without removing the detector tube from the pump inlet, turn it right or left 1/4 and repeat step ④ once.
- ⑦ In this case, actual concentration is half of the reading value.

