#6AH

AIRTEC WATER VAPOUR HIGH RANGE TUBE

1. General:

The AIRTEC Tube No. 6AH provides the measument of the concentration of Water Vapour in compressed air utilizing the sampling device, pressure reducer and air flow meter.

2. Performance:

Measuring Range: 500-5,000 ppm

Calibration Marks: 500, 1,000, 2,000, 3,000, 4,000 & 5,000 ppm

Colour Change: Green - Purple

Sampling Volume: 300 ml

Sampling Rate: 300 ml per minute

Sampling Time: 1 minute Shalf Life: 2 years

3. Measurement Procedure:

- Connect the clean pressure reducer to the air compressor or compressed air cylinder.
- 2. Fill the pressure reducer with air to be tested.
- Break tips off the AIRTEC tube and connect the tube into rubber tube holder that the sample air to be flowed through the arrow of the tube.
- Open the pressure reducer and introduce the sample air to AIRTEC tube. Check the flow rate through the tube at 300 ml/minute.
- 5. Wait 1 minute.
- After the sampling, read concentration at the interface of the highest stained reagent coloured dark brown.
- 7. If the stain length reaches the maximum cadibration mark during sampling, stop pressure reducer operation the true value by the following:

True Concentration (mg/m³) = $\frac{\text{Tube Reading x 300}}{\text{Sampled Volume (liters)}}$

4. Correction for Temperature and Humidity:

No correction is requid for tube temperature of $0-40^{\circ}$ C.

5. Detecting Principle:

Water Vapour is adsorbed by magnesium perchlorate to produce an alkaline which changes the color of Hammett indicator to purple.

$$H_2O + Mg(CIO_4) \longrightarrow Mg(CIO_4)_2 \cdot H_2O$$

SEE OPERATING INSTRUCTIONS INCLUDED WITH THE AIRTEC KIT.

Manufacturer: Gastec Corporation 6431 Fukaya, Ayase 252, Japan

91G-6AH-1 Printed in Japan