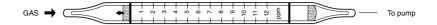
TWA-HYDROGEN SULPHIDE



1. PERFORMANCE

1) Measuring range : 1-20 ppm

> (1 hr.) (8 hrs.) 2-20 ppm 1-12 ppm

2) Sampling time 8 hrs. (6 m l/min.)

3) Shelf life 1 year 4) Operating temperature 10 ~ 30 ℃

Direct reading from the scale calibrated by 8 hrs. Sampling 5) Reading

6) Colour change White → Brown

2. RELATIVE STANDARD DEVIATION

RSD-low: 15% RSD-mid.: 15% RSD-high: 15%

3. CHEMICAL REACTION

By reacting with Lead acetate (II), Lead sulphide is produced.

 $H_2S + Pb(CH_3CO_2)_2 \rightarrow PbS + 2CH_3CO_2H$

4. CALIBRATION OF THE TUBE

PERMEATION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Sulphur dioxide		10	Higher readings are given.

(NOTE)

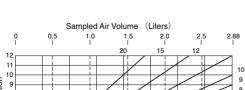
- 1) Model PM-2 personal sampler (option) ia available for this tube.
- 2) Flow Rate and Sampling Time
- (1) In case of 8 hours, sampling with 6m ℓ/min., the TWA concentration can be read directly by the scale printed on the tube at the top of Brown stain.
- (2) If the sampling duration is less than 8 hours, the actual TWA concentration can be obtained graphically from the chart provided below.
- (3) If the flow rate is not 6mℓ/min, divide the scale reading by the ratio of sampled air volume to 2880mℓ.

Actual TWA concentration (ppm) = $I \times \frac{2880}{I}$

I = Scale reading

V = Sampled air volume in ml

[Flow rate $(m\ell/\min) \times Sampling duration (\min)$]



Example:

- (a) If sampling time is 2 hours at 6mℓ/min and scale reading is 2, the actual TWA concentration is 8 ppm.
- (b) If sampled air volume is 2.5ℓ and scale reading is 6, the actual TWA concentrationis 7 ppm.

