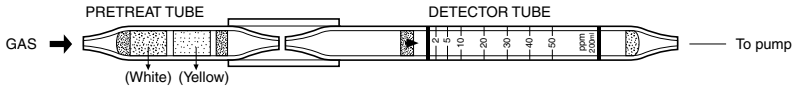
Tube No.
141SB CARBON DISULPHIDE



1. PERFORMANCE

1) Measuring range : 2-50 ppm 0.8-20 ppm
Number of pump strokes 2(200mℓ) 4(400mℓ)
2) Sampling time : 4 minutes/2 pump strokes
3) Detectable limit : 0.3 ppm(400mℓ)
4) Shelf life : 3 years(Necessary to store in a refrigerated place ; 0 ~ 10℃)
5) Operating temperature : 0 ~ 40℃
6) Temperature compensation : Necessary(See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 2 pump strokes.
8) Colour change : Pink → Yellow

2. RELATIVE STANDARD DEVIATION

C.V-low : 10% C.V.-mid. : 10% C.V.-high : 10%

3. CHEMICAL REACTION

Sulphur dioxide is produced by an Oxidizer.
By reacting between this Sulphur dioxide and alkali,
PH indicator is discoloured.

$CS_2 + CrO_3 + H_2SO_4 \rightarrow SO_2$
$SO_2 + 2NaOH \rightarrow Na_2SO_3 + H_2O$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Sulphur dioxide FIG.1	15	Similar stain is produced.		Higher readings are given.
Hydrogen sulphide FIG.2	100	〃	120	〃
Chlorine		Pale pink stain is produced.		〃

(NOTE)
In case of 4 pump strokes, following formula is available for the actual concentration.
Actual concentration = 2/5 × Temperature corrected value

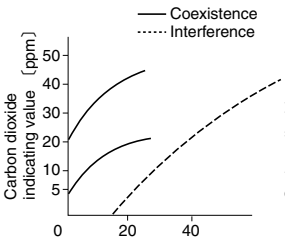


FIG.1 Influence of Sulphur dioxide

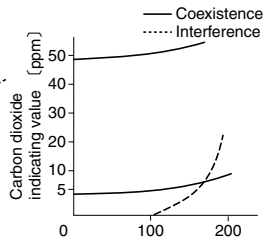


FIG.2 Influence of Hydrogen sulphide

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)				
	0℃ (32°F)	10℃ (50°F)	20℃ (68°F)	30℃ (86°F)	40℃ (104°F)
50	72	59	50	43	38
45	65	54	45	39	34
40	58	48	40	34	30
35	51	42	35	30	26
30	44	36	30	26	22
25	37	30	25	21	18
20	31	25	20	17	14
15	24	19	15	13	10
10	16	12	10	8	7
5	9	7	5	4	3
2	3	3	2	2	1