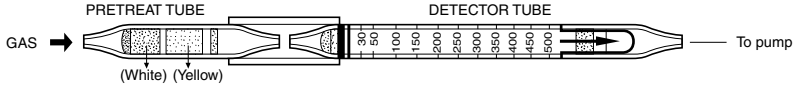
Tube No.
141SA

CARBON DISULPHIDE



1. PERFORMANCE

1) Measuring range : 30-500 ppm
   Number of pump strokes 1(100mℓ)
2) Sampling time : 2 minutes/1 pump stroke
3) Detectable limit : 10 ppm
4) Shelf life : 2 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 1 pump stroke
8) Colour change : Pink → Yellow

2. RELATIVE STANDARD DEVIATION

RSD-low : 10% RSD.-mid. : 5% RSD.-high : 5%

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	500	Similar stain is produced.		Higher readings are given.
Hydrogen sulphide FIG.2	400	〃	400	〃
Chlorine		White stain is produced.		〃

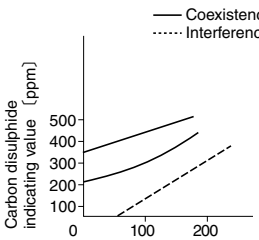


FIG.1 Influence of Sulphur dioxide

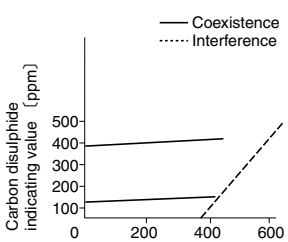


FIG.2 Influence of Hydrogen sulphide

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)				
	0℃ (32°F)	10℃ (50°F)	20℃ (68°F)	30℃ (86°F)	40℃ (104°F)
500	600	550	500	490	470
450	540	500	450	440	430
400	480	440	400	390	370
350	420	380	350	340	330
300	360	330	300	290	280
250	300	270	250	240	230
200	240	220	200	190	180
150	180	170	150	140	130
100	120	110	100	95	90
50	60	55	50	50	50
30	35	30	30	30	30