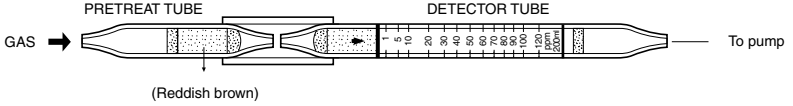
Tube No.
128SC ACRYLONITRILE



1. PERFORMANCE

1) Measuring range : 1-120 ppm
   Number of pump strokes 2(200mℓ)
2) Sampling time : 3 minutes/2 pump strokes
3) Detectable limit : 0.5 ppm(200mℓ)
4) Shelf life : 1 year(Necessary to store in 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 : Yellow→Pink

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By decomposing with an Oxidizer, Hydrogen cyanide is produced. This Hydrogen cyanide reacts with Mercuric chloride, then Hydrogen chloride is liberated and PH indicator is discoloured.

$CH_2=CHCN + CrO_3 + H_2SO_4 \rightarrow HCN$

$HCN + HgCl_2 \rightarrow HCl + Hg(CN)_2$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Hydrogen cyanide	Similar stain is produced.	2	Higher readings are given.
Methyl ethyl ketone		600	Lower readings are given.
Styrene		less than 250	The accuracy of readings is not affected.
Butadiene		200	Lower readings are given.

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)				
	0℃ (32°F)	10℃ (50°F)	20℃ (68°F)	30℃ (86°F)	40℃ (104°F)
120	165	140	120	104	90
100	142	117	100	87	77
90	127	105	90	79	70
80	112	93	80	70	62
70	98	81	70	62	55
60	84	70	60	53	48
50	69	58	50	45	41
40	55	46	40	37	34
30	41	34	30	28	27
20	26	22	20	20	20
10	12	10	10	10	10