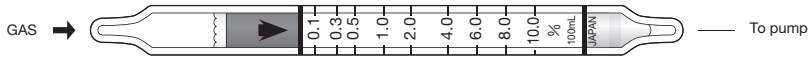
Tube No.
106UH

CARBON MONOXIDE



1. PERFORMANCE

1) Measuring range : 0.2-20 % 0.1-10 %
Number of pump strokes 1/2 (50mℓ) 1 (100mℓ)
2) Sampling time : 2 minutes/1 pump stroke
3) Detectable limit : 0.01 % (100mℓ)
4) Shelf life : 3 years
5) Operating temperature : 0 ~ 40 ℃
6) Temperature compensation : Necessary (0 ~ 20 ℃) (See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 1 pump stroke
8) Colour change : White → Dark brown

2. RELATIVE STANDARD DEVIATON

RSD-low : 15 % RSD-mid. : 15 % RSD-high : 10 %

3. CHEMICAL REACTION

Iodine pentoxide is reduced

$$CO + I_2O_5 + H_2SO_4 \rightarrow I_2$$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	%	Coexistence
Acetylene	Similar stain is produced.	2	Higher reading are given.
Ethylene	〃	2	〃
Isobutane	Speckled stain is produced.	0.5	〃
Propane	〃		The accuracy of reading is not affected.
Hexane FIG.1	Similar stain is produced.	0.4	The top of discoloured layer becomes unclear and higher readings are given.

(NOTE)
In case of 1/2 pump strokes, following formula is available for the actual concentration.
Actual concentration = 2 × Temperature corrected value

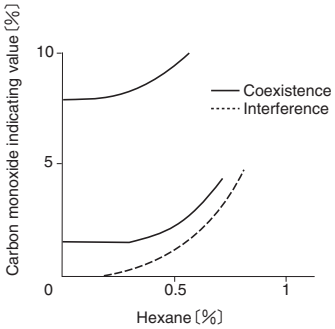


FIG.1 Influence of Hexane

TEMPERATURE CORRECTION TABLE

Tube Readings (%)	Corrected Concentration (%)			
	0 ℃ (32 ˚F)	5 ℃ (50 ˚F)	10 ℃ (68 ˚F)	20-40 ℃ (104 ˚F)
10.0	4.0	5.6	8.0	10.0
8.0	3.0	4.5	6.1	8.0
6.0	2.3	3.2	4.3	6.0
4.0	1.6	2.0	2.6	4.0
2.0	1.0	1.2	1.5	2.0
1.0	0.6	0.7	0.8	1.0
0.5	0.4	0.5	0.5	0.5