ACETONE



1. PERFORMANCE

1) Measuring range $\begin{array}{c} \text{1.001-4.0 \%} \\ \text{Number of pump strokes} \end{array}$

2) Sampling time : 1 minute/1 pump stroke 3) Detectable limit : 0.001 % (10 ppm)

4) Shelf life : 1 year (Necessary to store in refrigerated conditions ; $0 \sim 10 \, ^{\circ}\text{C}$)

5) Operating temperature : $0 \sim 40 \,^{\circ}\text{C}$

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 1 pump stroke

8) Colour change : Yellow→Pinl

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Hydrogen chloride of Hydroxylamine hydrochloride is liberated and acidfied, and PH indicator is discoloured. CH3COCH3 + NH2OH ⋅ HCI→HCI + (CH3) 2C = NOH + H2O

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence	
Acrolein	Similar stain is produced.	20	Higher readings are given.	
Acetaldehyde	"	30	"	
Methyl ethyl ketone	"	150	"	
Methyl isobutyl ketone	"	400	"	

TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (%)					
Readings (%)	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)	
4.0	_	_	4.0	3.2	2.7	
3.5	_	_	3.5	2.8	2.3	
3.0	_	4.1	3.0	2.4	2.0	
2.5	4.8	3.7	2.5	2.0	1.7	
2.0	3.9	2.8	2.0	1.6	1.4	
1.5	2.9	2.0	1.5	1.2	1.0	
1.0	1.8	1.3	1.0	0.8	0.7	
0.7	1.1	0.9	0.7	0.6	0.5	
0.5	0.8	0.7	0.5	0.4	0.3	
0.3	0.5	0.4	0.3	0.3	0.2	
0.1	0.16	0.12	0.1	0.08	0.05	