ISOPROPYL ALCOHOL



1 PERFORMANCE

1) Measuring range : 20-300ppm Number of pump strokes : 1(100mL)

2) Sampling time : 3 minutes / 1 pump stroke

3) Detectable limit : 4 ppm 4) Shelf life : 3 years 5) Operating temperature : 10~40°C

 $6) \, Temperature \, compensation \, : \, \, Necessary (\text{\it "See COEFFICIENT TABLE FOR TEPERATURE CORRECTION"}) \\$

7) Reading : The tube scales are calibrated based on Ethanol at 1 pump stroke and

the tube has the same sensitivity for Isopropyl alcohol

8) Colour change : Pink \rightarrow White or pale pink

2. RELATIVE STANDARD DEVIATION

RSD-low: - RSD-mid.: - RSD-high: -

3. CHEMICAL REACTION

Potassium permanganate is reduced.

CH₃CH(OH)CH₃ + KMnO₄ → White reaction products

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence				
Alcohols	Similar stain is produced.	Higher readings are given.				
1,3-Butadiene	//	"				
Dimethyl sulphide	//	"				
Hydrogen sulphide	//	"				
Isobutylene	//	"				
Acetone	Whole reagent is changed to White.	//				
n-Hexane	//	//				
Ammonia	The accuracy of readings is not affected.	Higher readings with indiscernable stain are given.				

COEFFICIENT TABLE FOR TEPERATURE CORRECTION

Temperature (°C)	0	1	2	3	4	5	6	7	8	9
10	1.20	1.18	1.16	1.14	1.12	1.10	1.08	1.06	1.04	1.02
20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
40	1.00	-	-	-	-	-	-	-	-	-

Actual concentration = Reading value \times Coefficient for temperature correction