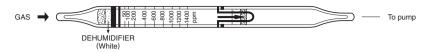
# **ISOBUTANE**



## 1. PERFORMANCE

1) Measuring range 50-1,200 ppm Number of pump strokes  $1 (100 \text{m} \ell)$ 

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit : 10 ppm4) Shelf life : 2 years5) Operating temperature  $: 0 \sim 40 \,^{\circ}\text{C}$ 

6) Reading : Graduations printed on the tube are calibrated by n-Hexane at 1 pump stroke and Isobutane concentration is determined by using a conversion chart.

7) Colour change : Orange → Yellowish green

#### 2. RELATIVE STANDARD DEVIATION

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

### 3. CHEMICAL REACTION

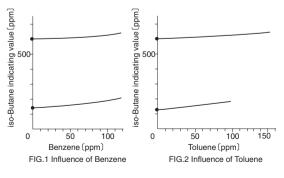
Chromium oxide is reduced  $(CH_3)_3CH = Cr^{6+} \rightarrow Cr^{3+}$ 

#### 4. CALIBRATION OF THE TUBE

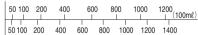
GAS CHROMATOGRAPHY

### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Alcohols	Similar stain is produced.	6%	Higher readings are given.
Ketones	"	"	"
Esters	"	"	"
Aromatic hydrocarbons FIG.1.2			The top of the discoloured layer is stained to Black and higher readings are given.
Aliphatic hydrocarbons (more than C <sub>3</sub> )	Similar stain is produced.		Higher readings are given.



Isobutane concentration (ppm)



No.113SB Tube reading (ppm)