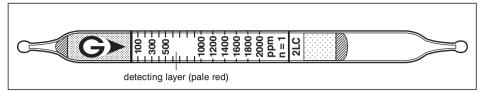
# Carbon Dioxide CO2

No.2LC



#### Performance

Measuring range	100 to 2000 ppm	2000 to 4000 ppm
Number of pump strokes	1(100 ml)	1/2(50 ml)
Correction factor	1	2
Sampling time	2 min	1 min

 $\begin{array}{lll} \mbox{Detecting limit:} & \mbox{20 ppm (1 pump stroke)} \\ \mbox{Colour change:} & \mbox{Pale red} \rightarrow \mbox{Orange} \\ \end{array}$ 

Corrections for temperature & humidity : Unnecessary

Relative standard deviation: 10 % (for 100 to 600 ppm), 5 % (for 600 to 2000 ppm)

Shelf life: 2 years

#### Reaction principle

CO<sub>2</sub> + 2KOH → K<sub>2</sub>CO<sub>3</sub> + H<sub>2</sub>O

### Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Ammonia	≤ 1000 ppm	No	No (≦ 1000 ppm)
Hydrogen chloride	≤ 500 ppm	No	No (≦ 500 ppm)
Chlorine	≤ 20 ppm	No	No (≦ 10 ppm)
Hydrogen cyanide	≤ 100 ppm	No	No (≦ 50 ppm)
Hydrogen sulphide	≤ 100 ppm	No	No (≦ 50 ppm)
Sulphur dioxide	≤ 25 ppm	No	No (≦ 25 ppm)
Nitrogen dioxide	≦ 20 ppm	No	No (≦ 20 ppm)

## Calibration gas generation

High pressure gas cylinder method