# **NICKEL CARBONYL**



### 1. PERFORMANCE

1) Measuring range  $\therefore$  20-700 ppm Number of pump strokes  $1(100 \text{m} \ell)$ 

2) Sampling time : 3 minutes/1 pump stroke

3) Detectable limit : 10 ppm4) Shelf life : 6 months5) Operating temperature  $: 0 \sim 40 \,^{\circ}\text{C}$ 

6) Reading : Concentration chart method 7) Colour change : Pale yellow→ Dark purple

### 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

By reacting with Gold chloride (III), colloidal gold is liberated. Ni(CO) $_4$  + AuCI $_3$   $\rightarrow$  Au

# 4. CALIBRATION OF THE TUBE

STANDARD GAS GYLINDER METHOD

#### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Arsine	Similar stain is produced.	10	Higher readings are given.
Iron carbonyl	"	10	"
Mercury vapour	"	10	"
Hydrogen sulphide	Brown stain is produced.	10	"
Sulphur dioxide	Pale blue stain is produced.	10	"
Carbon monoxide		1,000	"

