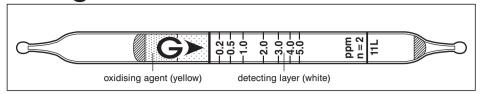
# Nitrogen Oxides NO + NO<sub>2</sub> (total quantification)

No.11L



#### Performance

Measuring range	0.04 to 0.08	0.08 to 0.2	0.2 to 5.0 ppm	5.0 to 16.5 ppm
Number of pump strokes	8 (800 ml)	4 (400 ml)	2 (200 ml)	1(100 ml)
Correction factor	0.2	0.4	1	3.3
Sampling time	16 min	8 min	4 min	2 min

 $\begin{array}{ll} \mbox{Detecting limit:} & \mbox{0.01 ppm (8 pump strokes)} \\ \mbox{Colour change:} & \mbox{White} \rightarrow \mbox{Yellowish orange} \\ \end{array}$ 

Corrections for temperature & humidity: Unnecessary

Relative standard deviation: 10 % (for 0.2 to 1 ppm), 5 % (for 1 to 5 ppm)

Shelf life: 3 years

## Reaction principle

 $NO + Cr^{6+} + H_2SO_4 \rightarrow NO_2$ 

NO<sub>2</sub> + o-Tolidine → Yellowish orange product

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to	
Bromine, Chlorine		+	Vallauriah aranga	
Chlorine dioxide		+	Yellowish orange	
Hydrogen sulphide	≥ 25 ppm	_	No No	
Sulphur dioxide	≥ 25 ppm	_	NO	

#### Calibration gas generation

Permeation tube method