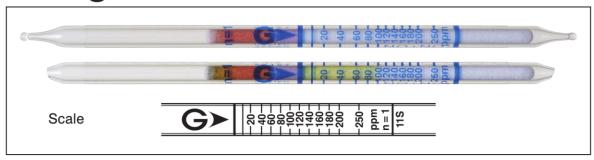




# Nitrogen Oxides NO & NO2

Part No.: 11S

# Nitrogen Oxides (total quantification) No.11S



**Performance** The minimum scale value (10ppm) is not printed on the tube, but only the scale line is printed.

Measuring range	5 to 10 ppm	(10) to 250 ppm	250 to 625 ppm
Number of pump strokes	2(200 mL)	1 (100 mL)	1/2(50 mL)
Correction factor	1/2	1	2.5
Sampling time	1.5 min	45 sec	30 sec

Detecting limit : 2 ppm (2 pump strokes)
Colour change : White → Pale green

Operating conditions: Temperature 0 to 40 °C (32 to 104 °F) correction not used

Relative humidity 20 to 90 % correction not used

Relative standard deviation: 10 % (for 10 to 80 ppm), 5 % (for 80 to 250 ppm)

Tube quantity and number of tests per box: 10 tubes for 10 tests

Shelf life: 24 months

## Reaction principle

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

 $NO_2 + (C_6H_5)_2NH \rightarrow C_6H_5NHC_6H_4NO$ 

### Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Hydrogen chloride	≥ 50 ppm	Unclear demarcation	Bluish purple(≥ 10 ppm)
Hydrogen sulphide	≥ 1/1	+	No
Ozone	≥ 80 ppm	Unclear demarcation	Pale brown
		(Two layers)	
Sulphur dioxide	≥ 1/1	+	No
Methanol	≥ 400 ppm	_	No

Nitric oxide is oxidized to form nitrogen dioxide. If organic solvent of high concentration is coexisting, oxidising agent is deteriorated to produce minus error for Nitric oxide concentration.

### Calibration gas generation

Permeation tube method