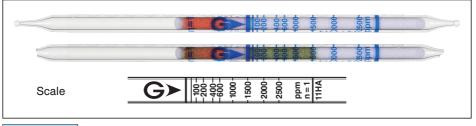
Nitrogen Oxides NO + NO₂ (total quantification) No.11HA



Performance

The minimum scale value (50ppm) is not printed on the tube, but only the scale line is printed.

| Measuring range | (50) to 2500 ppm | | |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Number of pump strokes | 1 (100 mL) | | |
| Correction factor | 1 | | |
| Sampling time | 1.5 min | | |
| Detecting limit : | 10 ppm (1 pump stroke) | | |
| Colour change : | White → Green | | |
| Operating conditions : | Temperature 0 to 40 °C (32 to 104 °F) correction not used | | |
| Relative standard deviatio Tube quantity and number of tes Shelf life : | Relative humidity 20 to 90 % correction not usedn :10 % (for 50 to 600 ppm), 5 % (for 600 to 2500 ppm)ts per box :10 tubes for 10 tests24 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 | ≧ 500 ppm | Unclear demarcation | Bluish purple at 100 ppm |
| Ozone | ≥ 200 ppm | Unclear demarcation | Brown |
| | | (Two layers) | |
| Sulphur dioxide | | No | No |
| Hydrogen sulphide | | No | 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

High pressure gas cylinder method