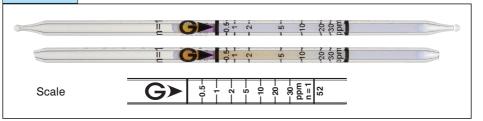
Pyrotube

Nitro Compounds

No.52



Performance

This detector tube is calibrated with Nitrogen dioxide.

Measuring range	0.5 to 30 ppm
Number of pump strokes	1 (100 mL)
Correction factor	1
Sampling time	2 min

 $\begin{array}{lll} \mbox{Detecting limit:} & \mbox{0.1 ppm (1 pump stroke)} \\ \mbox{Colour change:} & \mbox{White} \rightarrow \mbox{Yellowish orange} \\ \end{array}$

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

Relative humidity 0 to 90 % correction not used

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

Shelf life: 36 months

Reaction principle

Pyrotec: Nitro compounds (Pyrolyzing) NOx
Pyrotube: NOx + CrO₃ + H₂SO₄ → NO₂
NO₂ + o-Tolidine → Yellowish orange product

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Chlorine dioxide		+)
Halogens		+	Vollowish arange
Halogenated hydrocarbons		+	Yellowish orange
Hydrogen chloride		+	J
Sulphur dioxide	≥ 25 ppm	- (Bleaching)	No
Hydrogen sulphide	≥ 25 ppm	- (Bleaching)	No

Substances measurable with this Pyrotube

Substance	n	Correction factor	Measuring range
Acetonitrile	1	6.0	3 to 180 ppm
Nitroethane	1	8.0	4 to 240 ppm
Nitrogen dioxide	1	1.0	0.5 to 30 ppm
Nitromethane	1	10.0	5 to 300 ppm
1-Nitropropane	1	8.4	4.2 to 252 ppm
2-Nitropropane	1	7.4	3.7 to 222 ppm

Calibration gas generation

Permeation tube method