

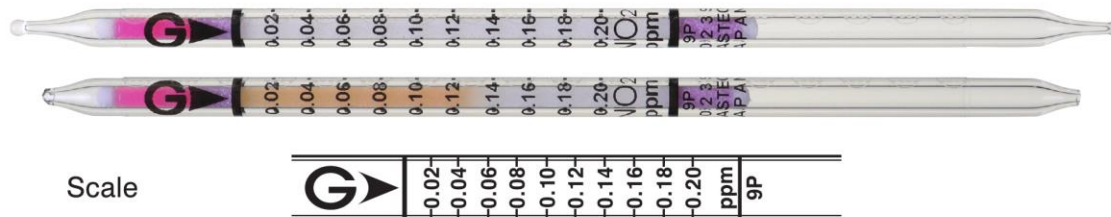


## Nitrogen Dioxide NO<sub>2</sub>

Part No.: 9P

Detector tube

# Nitrogen Dioxide NO<sub>2</sub> No.9P



### Performance

|                                             |                                                                                                          |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Measuring range                             | 0.02 to 0.20 ppm                                                                                         |
| Sampling rate                               | 100 mL/min (3000 mL)                                                                                     |
| Correction factor                           | 1                                                                                                        |
| Sampling time                               | 30 min                                                                                                   |
| Detecting limit :                           | 0.004 ppm (3000 mL)                                                                                      |
| Colour change :                             | White → Orangish brown                                                                                   |
| Operating conditions :                      | Temperature 0 to 40 °C (32 to 104 °F) correction used<br>Relative humidity 0 to 90 % correction not used |
| Relative standard deviation :               | 10 % (for 0.02 to 0.06 ppm), 5 % (for 0.06 to 0.2 ppm)                                                   |
| Tube quantity and number of tests per box : | 10 tubes for 10 tests                                                                                    |
| Shelf life :                                | 30 months                                                                                                |

### Reaction principle

NO<sub>2</sub> + 3,3',5,5'-Tetramethylbenzidine → Reaction product

### Possible coexisting substances and their interferences

| Substance             | Concentration | Interference | Changes colour by itself to |
|-----------------------|---------------|--------------|-----------------------------|
| Carbon monoxide       |               | No           | No                          |
| Nitric oxide          |               | No           | No                          |
| Chlorine              | ≤ 0.10 ppm    | No           | Reddish brown from 0.08 ppm |
| Ozone                 | ≤ 0.04 ppm    | No           | Pale yellow from 0.1 ppm    |
| Carbon dioxide        |               | No           | No                          |
| Acetone               |               | No           | No                          |
| p-dichloro benzene    |               | No           | No                          |
| n-decan               |               | No           | No                          |
| Aromatic hydrocarbons |               | No           | No                          |
| Formaldehyde          |               | No           | No                          |

### Calibration gas generation

Permeation tube method