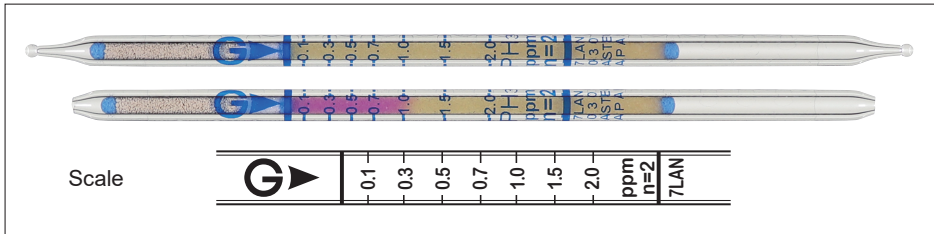


# Phosphine PH<sub>3</sub>

No. 7LAN



## Performance

Measuring range	0.04 to 0.06 ppm	0.06 to 0.1 ppm	0.1 to 2.0 ppm	2.0 to 3.8 ppm	3.8 to 8.4 ppm
Number of pump strokes	4 (400 mL)	3 (300 mL)	2 (200 mL)	1 (100 mL)	1/2 (50 mL)
Correction factor	0.4	0.6	1	1.9	4.2
Sampling time	6 min	4.5 min	3 min	1.5 min	45 sec

Detecting limit :	0.015 ppm (4 pump strokes)
Colour change :	Yellow → Pink
Operating conditions :	Temperature 0 to 40 °C (32 to 104 °F) correction not used Relative humidity 0 to 90 % correction not used
Relative standard deviation :	10 % (for 0.1 to 2.0 ppm)
Tube quantity and number of tests per box :	10 tubes for 10 tests
Shelf life :	24 months

## Reaction principle

Phosphine reacts with the reagent to form intermediate material which stains indicator pink.

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Arsine	≥ 0.05 ppm	+	Pink (≥ 0.03 ppm)
Diborane	10 times	No	No (90 ppm)
Hydrogen chloride	≤ 2000 ppm	No	No (≤ 2000 ppm)
Hydrogen sulphide	≤ 1 ppm	No	No (≤ 1 ppm)
Monosilane	≥ 1 ppm	+	No (≤ 3 ppm)
Ammonia	93 ppm	No	No (188 ppm)
Carbon dioxide	10 %	No	No

## Calibration gas generation

High pressure gas cylinder method