

Phosphine 0.1/c

Order No. 81 03 711

Application Range

Standard Measuring Range:	0.5 to 3 ppm / 0.1 to 1.0 ppm
Number of Strokes n:	1 / 3
Time for Measurement:	approx. 1 min / approx. 2.5 min
Standard Deviation:	± 10 to 15 %
Color Change:	yellow → red

Ambient Operating Conditions

Temperature:	2 to 40 °C
Absolute Humidity:	< 40 mg H ₂ O / L

Reaction Principle

$$\text{HgCl}_2 + \text{PH}_3 \rightarrow \text{Hg-phosphide} + \text{HCl}$$

$$\text{HCl} + \text{pH-Indicator} \rightarrow \text{red reaction product}$$

Cross Sensitivity

A maximum of 6 ppm sulphur dioxide or 15 ppm hydrogen chloride have no influence on the reasing. Higher concentration result in plus errors. Ammonia (>100 ppm) result in minus errors. Hydrogen sulphide and Arsine are indicated with different sensitivity. 30 ppm hydrocyanic acid does not affect.

