

Hydrocyanic Acid 0.5/a

Order No. 81 03 601

Application Range

Standard Measuring Range:	0.5 to 5 ppm	/ 5 to 50 ppm
Number of Strokes n:	10	/ 2
Time for Measurement:	approx. 2.5 min.	/ ca. 0.5 min.
Standard Deviation:	± 10 to 15 %	
Color Change:	yellow → red	

Ambient Operating Conditions

Temperature:	0 to 40 °C
Absolute Humidity:	< 40 mg H ₂ O / L

Reaction Principle

- $\text{HCN} + \text{HgCl}_2 \rightarrow \text{HCl}$
- $\text{HCl} + \text{methyl red} \rightarrow \text{red reaction product}$

Cross Sensitivity

30 ppm hydrogen sulfide, 300 ppm ammonia, 40 ppm sulfur dioxide, 20 ppm nitrogen dioxide and 1,000 ppm hydrogen chloride do not affect the indication.

Hydrogen sulfide causes the pre-layer to discolor to dark brown.

Ammonia concentrations above 300 ppm can cause the indication at the beginning of the indicating layer to discolor back to yellow.

Acrylonitrile up to a concentration of 1,000 ppm does not affect the indication.

It is impossible to measure hydrocyanic acid in the presence of phosphine.

