

Hydrochloric Acid/Nitric Acid 1/a

Order No. 81 01 681

H

Application Range

Standard Measuring Range:

Substance:	Hydrochloric acid: nitric acid:	
Standard Measuring Range:	1 to 10 ppm	/ 1 to 15 ppm
Number of Strokes n:	10	/ 20
Time for Measurement:	approx. 1.5 min	/ approx. 3 min
Standard Deviation:	$\pm 30 \%$	
Color Change:	blue \rightarrow yellow	

Ambient Operating Conditions

Temperature: 5 to 40 °C for HCl

For HNO_3 measurements, the tube scales are applicable only to 20 °C. Where the temperature is different, the measuring result must be multiplied as follows:

Temperature °C	Factor
40	0.3
30	0.4
10	2

Absolute Humidity: max. 15 mg H_2O / L

Reaction Principle

HCl and/or HNO_3 + pH indicator \rightarrow yellow reaction product

Cross Sensitivity

50 ppm nitrogen dioxide result in almost the same reading as 2 ppm nitric acid. 10 ppm hydrogen sulfide or 5 ppm nitrogen dioxide do not effect the reading. Chlorine concentrations in excess of 1 ppm change the entire indicating layer to a yellow-green.

