

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.



ST-156-2001