Acetic Acid 5/a

Order No. 67 22 101

Application Range

Standard Measuring Range:	5 to 80 ppm
Number of Strokes n:	3
Time for Measurement:	approx. 30 s
Standard Deviation:	± 10 to 15 %
Color Change:	blue violet → yellow

Ambient Operating Conditions

Temperature:	10 to 40 °C
Absolute Humidity:	< 30 mg H_2O / L

Reaction Principle

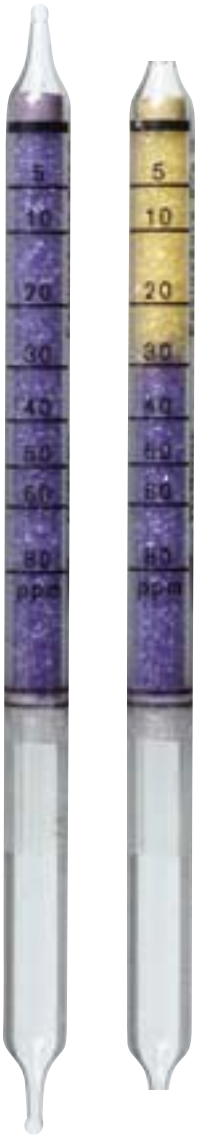
CH_3COOH + pH Indicator → yellow reaction product

Cross Sensitivity

It is impossible to measure acetic acid in the presence of other acids.

Organic acids are indicated by the same color change, but with different sensitivities.

Mineral acids (e.g. hydrochloric acid) are indicated by red discolorations and different sensitivities.



ST-40-2001

Formic Acid 1 to 20 g/L

Order No. 67 22 101

Application Range

Determination of formic acid in water/waste water

Dräger-Tube:	Acetic Acid 5/a
Measuring range:	0.5 to 15 g/L
Number of Strokes (n):	10
Typical Stroke Time:	10 to 30 s
Measurement Time:	approx. 200 s
Sample Volume:	200 mL
Color Change:	blue violet → yellow
Temperature Range:	5 to 25 °C
pH-Measurement:	necessary

Information of Measurement

Using sulfuric acid, the pH-value has to be adjusted to the value of 1.3.

System Parameters (valid for pH 1.3)

Measurement Range [g/L]	Standard Deviation [%]	Temperature [°C]	Parameters B	C
8.5 to 15	25	10 to 25	0.241	1.157

Evaluation of Measurement

Calculate formic acid concentration:

$$Y_{[g/L]} = A \bullet B \bullet (X_{[ppm]} + C)$$

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Propionic Acid 0.3 to 10 g/L

Order No. 67 22 101

Application Range

Determination of propionic acid in water/waste water

Dräger-Tube:	Acetic Acid 5/a
Measuring range:	0.3 to 10 g/L
Number of Strokes (n):	10
Typical Stroke Time:	10 to 30 s
Measurement Time:	approx. 200 s
Sample Volume:	200 mL
Color Change:	blue violet → yellow
Temperature Range:	10 to 30 °C
pH-Measurement:	necessary

Information of Measurement

Using sulfuric acid, the pH-value has to be adjusted to the value of 1.3.

System Parameters (valid for pH 1.3)

Measurement Range [g/L]	Standard Deviation [%]	Temperature [°C]	Parameters B	C
0.3 to 10	25	10 to 30	0.153	0.687

Evaluation of Measurement

Calculate propionic acid concentration:

$$Y_{[g/L]} = A \bullet B \bullet (X_{[ppm]} + C)$$

Cross Sensitivity

Acetic acid and formic acid are indicated with lower sensitivity.

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Organic Acids 0.5 to 15 g/L

Order No. 67 22 101

Application Range

Determination of sum parameter acetic acid, formic acid and propionic acid in water/waste water

Dräger-Tube:	Acetic Acid 5/a
Measuring range:	0.3 to 15 g/L
Number of Strokes (n):	10
Typical Stroke Time:	10 to 30 s
Measurement Time:	approx. 200 s
Sample Volume:	200 mL
Color Change:	blue violet → yellow
Temperature Range:	10 to 25 °C
pH-Measurement:	necessary

Information of Measurement

Using sulfuric acid, the pH-value has to be adjusted to the value of 1.3.

System Parameters (valid for pH 1.3)

Measurement Range [g/L]	Standard Deviation [%]	Temperature [°C]	Parameters B	C
0.5 to 15	25	10 to 25	0.241	1.157

Evaluation of Measurement

Calculate acid concentration:

$$Y_{[g/L]} = A \bullet B \bullet (X_{[ppm]} + C)$$

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