

1.10036.0001

MQuant™ Formaldehyde Test

HCHO

1. Method

Formaldehyde reacts with 4-amino-3-hydrazino-5-mercapto-1,2,4-triazole to form a purple-red tetrazine. The formaldehyde concentration is measured **semiquantitatively** by visual comparison of the reaction zone of the test strip with the fields of a color scale.

2. Measuring range and number of determinations

| Measuring range / color-scale graduation | Number of determinations |
|--|--------------------------|
| 10 - 20 - 40 - 60 - 100 mg/l HCHO | 100 |

3. Applications

Sample material:

Disinfectant and rinsing solutions (e. g. laundries)
Aqueous solutions

4. Influence of foreign substances

This test also reacts to other aldehydes (e. g. acet-aldehyde), albeit with a lower sensitivity and with a different colouration of the reaction zone.

Strong reducing and oxidizing agents interfere with the determination.

5. Reagents and auxiliaries

Please note the warnings on the packaging materials!

The test strips and the test reagent are stable up to the date stated on the pack when stored closed at +2 to +8 °C.

Package contents:

Tube containing 100 test strips
2 bottles of reagent Fo-1
1 test vessel

6. Preparation

Samples containing more than 100 mg/l HCHO must be diluted with distilled water.

7. Procedure

Rinse the test vessel several times with the pretreated sample.

| | | |
|--------------------------------|------------------------|--|
| Pretreated sample (15 - 30 °C) | 5 ml | Fill the test vessel to the 5-ml mark. Add and swirl. |
| Reagent Fo-1 | 10 drops ¹⁾ | |

Immerse the reaction zone of the test strip in the measurement sample **for 1 sec.**

Allow excess liquid to run off via the long edge of the strip onto an absorbent paper towel and **after exactly 60 sec** determine with which color field on the label the color of the reaction zone coincides most exactly.

Read off the corresponding result in mg/l HCHO.

¹⁾ **Hold the bottle vertically while adding the reagent!**

Notes on the measurement:

- The color of the reaction zone may continue to change after the specified reaction time has elapsed. This must not be considered in the measurement.
- If the color of the reaction zone is equal to or more intense than the darkest color on the scale, repeat the measurement using **fresh**, diluted samples until a value of less than 100 mg/l HCHO is obtained.

Concerning the result of the analysis, the dilution (see also section 6) must be taken into account:

Result of analysis = measurement value x dilution factor

8. Method control

To check test strips, test reagent, measurement device, and handling, a freshly prepared formaldehyde standard solution containing 40 mg/l HCHO (application see the website) can be used.

Analyze this standard solution as described in section 7.

Additional notes see under www.qa-test-kits.com.

9. Notes

- **Reclose** the reagent bottle and **the tube containing the test strips immediately after use.**
- Rinse the test vessel **with distilled water only.**

