

0.05–3.0 mg/L H<sub>2</sub>CO

LCS 425

**Scope and application:** For chipboard after previous perforation (ISO 12460), fabrics, air, cosmetics, wastewater and process analysis.



## Test preparation

### Test storage

Storage temperature: 15–25 °C (59–77 °F)

### pH/Temperature

The pH of the water sample must be between pH 3–10.

The temperature of the water sample and reagents must be between 15–25 °C (59–77 °F).

### Before starting

Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.

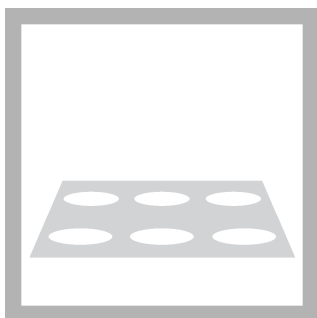
Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheets for disposal information for unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

The time in the thermostat must be strictly observed (60 °C (140 °F) for 10 minutes).

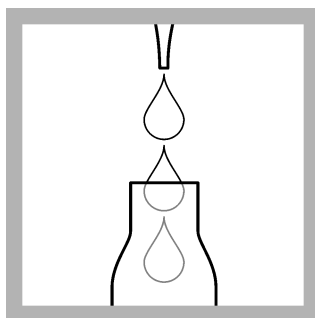
50 mm semi-micro cuvettes are necessary to analyze the test.

The test can not be analyzed on the DR 1900.

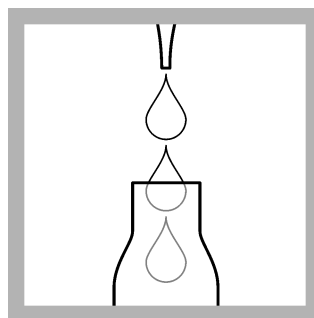
### Procedure



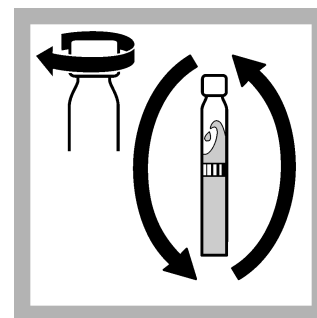
1. Preheat the thermostat to 60 °C (140 °F).



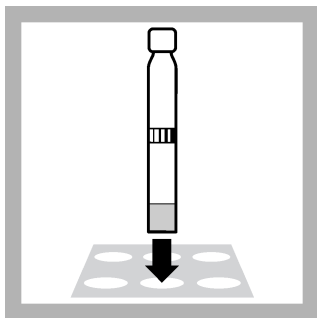
2. **Blank-value:** Carefully pipet into the cuvette test: 1.5 mL of deionized water and 1.5 mL solution A.



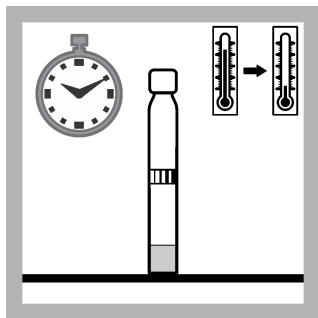
3. **Sample:** Carefully pipet into the cuvette test: 1.5 mL of sample and 1.5 mL solution A.



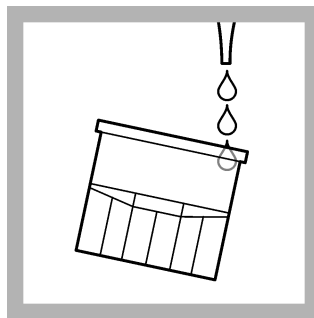
4. Close the cuvettes and invert a few times.



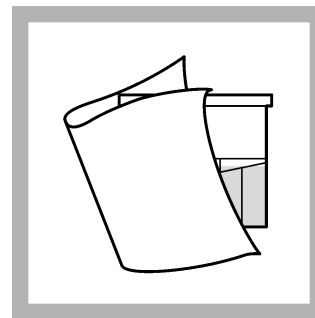
5. Heat in the thermostat at **60 °C (140 °F)** for **10 minutes**.



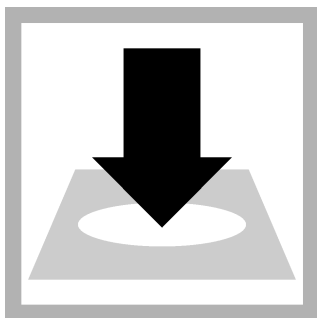
6. Allow to cool down to room temperature for **60 minutes**.



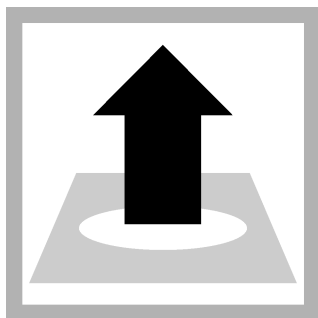
7. Transfer the contents to 50 mm semi-micro cuvettes.



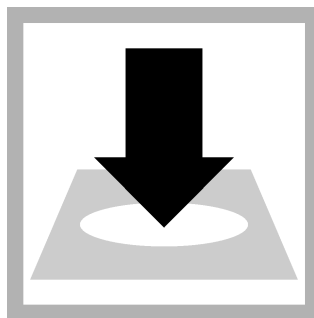
8. Thoroughly clean the outside of the 50 mm semi-micro cuvettes and evaluate. **Take care that there are no air bubbles!**



9. Select the test, insert the blank-value cuvette into the cell holder and push **ZERO**.



10. Remove the blank-value cuvette.



11. Insert the sample cuvette into the cell holder and push **READ**.

## Interferences

The high selectivity of the method almost completely excludes interferences from other aldehydes. Strong oxidizing agents interfere. The measurement results must be subjected to plausibility checks (dilute and/or spike the sample).

## Summary of method

Formaldehyde reacts in aqueous solution with ammonium ions and acetylacetone to give a yellow dye.



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