

5–50 mg/L K<sup>+</sup>

LCK 228

**Scope and application:** For raw and drinking water, wastewater, soil, substrates, nutrient solutions 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.

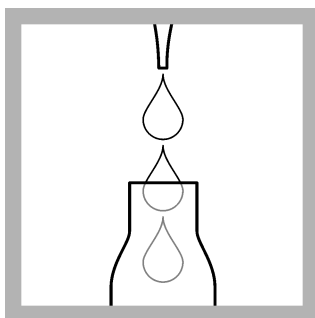
Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheets for disposal information for unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

Filter turbid samples with Membrane Filtration Set LCW 904.

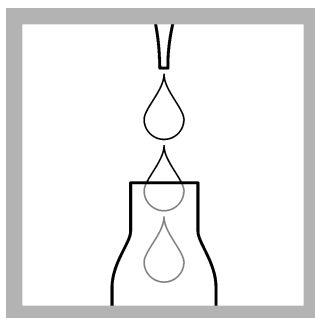
The intensity of turbidity depends on many factors (temperature, time, concentration, solvents, bacterial activity and pH value) and thus can vary considerably, the accuracy of the test is about ±1.5 mg/L.

**Reagent B is extremely susceptible to moisture. Only open the reagent B bottle for short periods of time. Keep the spoon dry at all times.**

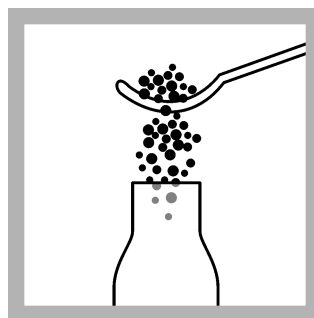
### Procedure



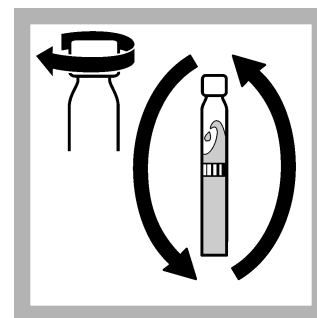
1. Carefully pipette 1.0 mL of solution A.



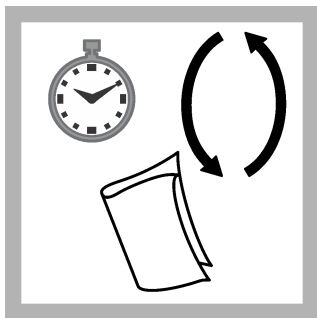
2. Carefully pipette 1.0 mL of sample.



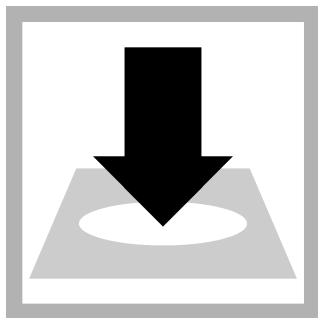
3. Add 1 level spoonful of reagent B.



4. Close the cuvette and invert a few times.



**5.** After 5 minutes, invert a few more times, thoroughly clean the outside of the cuvette and evaluate.



**6.** Insert the cuvette into the cell holder.  
DR 1900: Go to LCK/TNTplus methods. Select the test, push **READ**.

## Interferences

$\text{NH}_4^+$  >150 mg/L,  $\text{Hg}^+$ ,  $\text{Cs}^+$  and  $\text{Rb}^+$  also form slightly soluble precipitates with the reagents and causes high-bias results. Interfering ammonia up to 150 mg/L is absorbed by formaldehyde. Do a plausibility check on the measurement results (dilute and/or spike the sample).

## Summary of method

Potassium ions react in alkaline solution with Kalignost to form a slightly soluble precipitate of potassium tetraphenylborate. The resulting turbidity is measured photometrically.



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