

# Potassium

## Test kit for determination of potassium ions in surface water and sewage

**Method:**

Turbidity measurement with sodium tetraphenyl borate

**Measurement range:**

2–15 mg/L K<sup>+</sup>

**Contents of test kit (\*refill pack):**

sufficient for 60 tests

2 x 25 mL K-1\*

12 g K-2\*

1 measuring spoon 85 mm\*

1 sample tube with mark

1 measuring tube 2–15 mg/L K<sup>+</sup>

1 instructions for use\*

**Hazard warning:**

K-1 contains sodium hydroxide solution 2–5 %, K-2 contains sodium tetraphenyl borate 14–35 %.

H314 Causes severe skin burns and eye damage.

P260, P280, P301+330+331, P303+361+353, P304+340, P305+351+338 Do not breathe vapors. Wear protective gloves/eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. For further information ask for a safety data sheet.

**Instructions for use:**

1. Rinse sample tube several times with the test sample and fill up to the graduation mark.
2. Add **15 drops K-1**, close sample tube, mix.
3. Add **1 level measuring spoon K-2**, close sample tube again and shake evenly about **30 s** until the powdered reagent is completely dissolved. The test mixture becomes more or less turbid.
4. Pour the liquid from the sample tube into the measuring tube until the black cross on the bottom of the measuring tube is no longer visible (as observed directly from above). The potassium concentration can be read off directly from the graduation on the measuring tube (bottom of meniscus).
5. Immediately after reading off the test result, rinse the sample and measuring tubes thoroughly with water (if necessary also clean with a brush).

The method can also be applied for the analysis of sea water after dilution (1+1) and filtration after addition of reagent K-1.

The reagents can also be used for the **photometric evaluation** with photometer PF-11 /PF-12.

**Disposing of the samples:**

The used analysis specimens can be flushed down the drain with tap water and channelled off to the local sewage treatment works.

**Interferences:**

Turbidities interfere; turbid test samples have to be filtered prior to the analysis (e. g. with membrane filtration kit 0.45 µm, REF 916 50).

**Storage:**

Store the test kit in a cool (< 25 °C) and dry place.

