

Order number

**170103**

## Water Analysis Kit: Orthophosphate

### Measuring range $\text{PO}_4^{3-}$ 2 - 15 mg/l

**ATTENTION!**

This water analysis kit contains chemicals which may be hazardous to the health and safety of the user in the case of improper application. Always keep this kit away from children. Read the instructions and information on the genuine containers before starting your work. Take all appropriate safety measures. For additional information please refer to the respective EC safety data sheets which we will provide upon request.

**Contents**

- 1 PE funnel  $\varnothing$  60 mm
- Carbon filter paper  
1 pack containing 100 sheets
- Colour comparison scale with empty ampoule
- 250 ml PE bottle  
phosphate reagent I: aqueous solution of disodium disulphite and 4-(methylamino)-phenol sulphate
- 250 ml PE bottle  
phosphate reagent II: diluted sulphuric acid

**Application**

- 1.) In the area of boiler water, phosphate is used to precipitate residual hardness and to correct the pH value.
- 2.) Phosphates may be present in drinking water in the form of orthophosphate or polyphosphates. Only orthophosphates can be determined directly. This can be done by means of the water analysis kit 170103.

**Analysis**

1. If necessary, filter the water to be analysed.
2. Fill the test tube with water up to the 20 ml mark.
3. Add 1 ml phosphate reagent I and shake well. (by pressing the bottle, 1 ml of the solution is automatically delivered into the neck of the bottle)
4. Add 1 ml phosphate reagent II and shake again.
5. Wait for 10 minutes.
6. Determine the phosphate concentration of the sample by comparing the blue colour with the comparison scale.
7. If the measuring range of the comparison scale is exceeded, use a diluted sample for a new analysis:
  - a) Up to 20 mg phosphate/l  
Use 5 ml of the water sample and add distilled water up to the 20 ml mark. The phosphate concentration will be four times the measured value.
  - b) Up to 50 mg phosphate/l  
Use 2 ml of the water sample and add distilled water up to the 20 ml mark. The phosphate concentration will be 10 times the measured value.

**Storage**

Store the reagents in a dry, ventilated place which is inaccessible to children.

**Observe the instructions and "Use before" information printed on the containers.**

**Delivery**

The water analysis kit comes as a complete kit. Spare parts can be ordered. Please specify the order numbers shown below when ordering spares.

**Note**

Poly- and organophosphates are analysed in the same way. However, the samples must first be disintegrated (170113/170114). You may purchase the necessary parts and reagents, if required.

**Information**

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Description	Order no.
PE funnel $\varnothing$ 60 mm	888 06 006
Carbon filter paper 100	888 09 011
Colour comparison scale for the determination of phosphate, complete with colour comparison scale 2-15 mg $\text{PO}_4^{3-}$ /l	170800 170801
Empty ampoule with plastic plug 2-20ml	170802
250 ml PE bottle phosphate reagent I	170501
250 ml PE bottle phosphate reagent II	170502