visocolor® ECO

en

Phosphate

Test kit for performing colorimetric tests on phosphate ions in surface water and sewage

Method:
Ammonium molybdate forms with phosphate ions phosphomolybdic acid, which is reduced to phosphomolybdenum blue.

Measurement range:
0,2 - 5 mg/l PO_4-P

Contents of test kit (*refill pack):
sufficient for 80 tests

25 ml	PO_4-1*
25 ml	PO_4-2*
2	screw-plug measuring glasses
1	slide comparator
1	colour chart
1	plastic syringe 5 ml
1	instructions for use*

Hazard warning:
Reagent PO_4-1 contains hazards which are not labelled with <Xi> (certificate of exemption for small quantities), see safety data sheet.

Instructions for use:
also refer to the pictogram on the back of the colour chart

1. Pour a 5 ml water sample into each of the measuring glasses using the plastic syringe.
   Place a measuring glass on position A in the comparator.

Only add the reagent to measuring glass B.

2. Add **6 drops of PO_4-1**, seal the glass and mix.
3. Add **6 drops of PO_4-2**, seal the glass and mix.
4. Open the glass after **10 min** and place it on position B in the comparator.
5. Slide the comparator until the colours match in the inspection hole on top. Check the measurement reading in the recess on the comparator reed. Mid-values can be estimated.
6. After use, rinse out both measuring glasses thoroughly and seal them.

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

This technique can be used also for analysing sea water.

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:
Larger amounts of oxidizing reagents inhibit formation of the blue colour complex and have to be destroyed. H_2S interferes in concentrations above 2 mg/l, but can be expelled after acidification of the water sample. Heavy metals in excess of 10 mg/l can slightly decrease the intensity of the colour (vanadium causes an increase in colour). Silica interferes in excess of 10 mg/l Si.

Conversion table:

mg/l PO_4-P (Phosphate-phosphorous)	mg/l PO_4^{3-}	mg/l P_2O_5
0.2	0.6	0.5
0.3	0.9	0.7
0.5	1.5	1.1
0.7	2.1	1.6
1	3	2
2	6	5
3	9	7
5	15	12

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

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · D-52355 Düren (Germany)
Phone +49 24 21 9 69-0 · Fax +49 24 21 9 69-199 · e-mail: sales-de@mn-net.com