QUANTOFIX® Phosphate

GB

Contents:

1 Aluminium container with 100 test sticks
1 Bottle Phosphate-1
1 Bottle Phosphate-2
1 Measuring tube with 5 ml mark
1 Test tube

Safety precautions:

Phosphate-1 contains 19% nitric acid. Causes burns. Keep out of reach of children. Do not breathe vapour. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye protection. If you feel unwell, seek medical advice immediately.

Method of application:

1. Rinse measuring tube with the sample and fill to the 5 ml mark.
2. Add 5 drops Phosphate-1 (nitric acid) and shake carefully.
3. Place test tube into the recess of the thermoformed lining and fill with six drops Phosphate-2.
4. Remove only as many test sticks as are required, and reseal the container immediately after use. Do not touch the test paper zone.
5. Place test stick into the prepared sample solution for 15 seconds. Shake off excess liquid.
6. Then place test stick into the filled test tube for 15 seconds. Again shake off excess liquid.
7. After further 60 seconds compare test field with the colour scale. If phosphate ions are present, the test paper turns blue-green.

Interferences:

Only ortho-phosphate is determined. Other phosphates, such as poly-, pyro- and meta-phosphates, have to be decomposed for determination of the total phosphate. Silica (SiO_2) contents greater 10 mg/l react in the same way giving a blue colouration and thus simulate a higher phosphate concentration. Larger amounts of sulphide ions (S^{2-}) cause a brown colour of the test field, smaller concentrations cause low results.

The following ions do not interfere:

< 1000 mg/l Ag^+, Al^{3+}, Cd^{2+}, Co^{2+}, Cr^{3+}, Mg^{2+}, Mn^{2+}, NH_4^+, Ni^{2+}, Zn^{2+}, Cl^-, F^-, NO_3^-, SO_4^{2-}, citrate, oxalate, tartrate, < 500 mg/l Ca^{2+}, < 250 mg/l Pb^{2+}, < 50 mg/l Cu^{2+}, < 25 mg/l Fe^{3+}, < 5 mg/l Fe^{2+}, < 2 mg/l NO_2^-.

Conversion factors: 1.0 mg PO_4^{3-} = 0.75 mg P_2O_5 = 0.33 mg P.

Storage:

Avoid exposing the sticks to sunlight and moisture. Store the kit below + 30 °C in a dry place.

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