

QUANTOFIX[®] Nitrate 100

Description:

QUANTOFIX[®] Nitrate 100 are test strips for the semi-quantitative determination of nitrate ions (NO_3^-) in aqueous solutions or samples. False positive color reactions of the nitrate test field in concomitant presence of nitrite (NO_2^-) are indicated by an additional nitrite test field. QUANTOFIX[®] Nitrate 100 test strips are also suitable for reflectometric evaluation using the QUANTOFIX[®] Relax (REF 913 46).

Pack content:

1 aluminum container with 100 test strips

Measuring range:

Visually:

5–100 mg/L nitrate NO_3^-

0.5–50 mg/L nitrite NO_2^-

Reflectometrically:

3–100 mg/L nitrate NO_3^-

0.5–50 mg/L nitrite NO_2^-

Color gradation:

0 · 5 · 10 · 25 · 50 · 75 · 100 mg/L nitrate NO_3^-

0 · 0.5 · 2 · 5 · 10 · 25 · 50 mg/L nitrite NO_2^-

General indications:

Remove only as many test strips as are required. Close the container immediately after removing a strip. Do not touch the test fields.

Instructions for use:

1. Insert the test strip with both fields into the test solution for 1 s.
2. Shake off excess liquid.
3. Wait 60 s.
4. Compare the test fields immediately to the color scale. Read the values which match the color of the test fields most closely (reading accuracy: $\pm 1/2$ colored field of the scale). If nitrate ions are present, the outer test field (at the end of the strip) will turn red-violet. In case of a color change of the nitrite warning field (at the holding end) please read the information on "Interferences".

The reaction color of the test fields may change after the value has been taken. It is therefore crucial to evaluate the coloration within the prescribed time scale in order to achieve a correct result.

Interferences:

In case of a positive color change of the nitrite test field, the result of the nitrate determination is invalid. To eliminate the nitrite interference, add 1 spoonful of amidosulfuric acid (REF 918 973) to 10 mL of the sample. Subsequently repeat the test with this solution.

Strongly acidic solutions ($\text{pH} < 1$) must be buffered with sodium acetate, and alkaline solutions ($\text{pH} > 12$) with citric acid to a pH of 3–5.

The following ions do not interfere yet with the determination when the concentrations below are not exceeded (tested with 0 and 25 mg/L, respectively, of nitrate solutions):

1000 mg/L: Al^{3+} , As^{3+} , Ba^{2+} , Ca^{2+} , Co^{2+} , K^+ , Mg^{2+} , Mn^{2+} , Na^+ , Ni^{2+} , Pb^{2+} , Zn^{2+} , Cl^- , CN^- , SO_4^{2-}

500 mg/L: Fe^{2+} , SO_3^{2-}

250 mg/L: Fe^{3+} , $\text{S}_2\text{O}_3^{2-}$

100 mg/L: $[\text{Fe}(\text{CN})_6]^{4-}$, $[\text{Fe}(\text{CN})_6]^{3-}$, Hg^{2+} , SCN^-

50 mg/L: Ag^+ , Hg^+

25 mg/L: S^{2-}

0.25 mg/L: NO_2^- (see above)

Note:

The test strip container stopper contains a non-toxic drying agent. If swallowed, drink plenty of water.

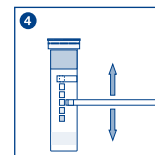
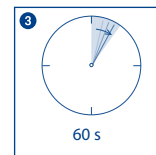
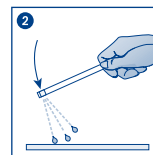
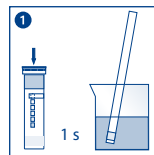
Disposal:

Used test strips can be placed in the normal household waste.

Storage:

Avoid exposing the strips to sunlight and moisture. Keep container cool and dry (storage temperature not above +30 °C).

If correctly stored, the test strips may be used until the use-by-date printed on the packaging.



Product data and ordering information

Type	test strips
Presentation	100 test strips
Color reaction	yellow to red-violet
Range	0 · 5 · 10 · 25 · 50 · 75 · 100 · mg/l (ppm) NO_3^- 0 · 0.5 · 2 · 5 · 10 · 25 · 50 mg/l NO_2^-
REF	91351