

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 91346).

Pack content:

1 aluminum container with 100 test strips

Measuring range:

Visually	Reflectometrically
5–100 mg/L NO_3^-	3–100 mg/L NO_3^-
0.5–50 mg/L NO_2^-	0.5–50 mg/L NO_2^-

Color gradation:

0 · 5 · 10 · 25 · 50 · 75 · 100 mg/L NO_3^-
0 · 0.5 · 2 · 5 · 10 · 25 · 50 mg/L NO_2^-

Hazard warnings:

This test does not contain hazardous substances that must be labelled.

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. For the application in dairy products (e.g. whey) the corresponding special prescription and reflectometric special method (NO_3^- 100 S1 or S2) is recommended.

The special regulation can be found in the download area of the product on our website:

https://www.mn-net.com/media/pdf/20/a4/a2/SI_Nitrate_100_in_dairy_products_EN.pdf

Instructions for use:

1. Dip 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: $\pm \frac{1}{2}$ 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 918973) 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)

Disposal:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.

Storage:

Avoid exposing the strips to sunlight and moisture. Keep container cool and dry (storage temperature 4–30 °C).

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

