

Application note

Version 1

Determination of Nitrite in Spinach

Overview	
Parameter	Nitrite
Test	QUANTOFIX® Nitrite 25 (REF 91367)
General Information	The determination of nitrite in vegetables is necessary for the food processing industry in order to detect and, if necessary, remove undesirable nitrite levels. In order to obtain correct results with the QUANTOFIX® Nitrite 25 test strip, we recommend an adapted measuring method for measurements in spinach samples.



Sample Preparation, Procedure, and Calculation of Results

Procedure	
	Grind 25 g of the sample to be tested in 80 mL of distilled water, e.g. using a mixer, and then boil for approx. 15 minutes. Fill the cooled sample up to 100 mL using distilled water and filter. The filtrate is the sample to be analyzed.
Evaluation	
Liquid samples	
Visual Evaluation	1. dip the test strip into the sample for 1 s. 2. shake off excess liquid. 3. wait for 60 s. 4. compare the test strip to the color scale.
On the QUANTOFIX® Relax (version 3)	1. select method NO₂ 25. 2. dip the test strip into the sample for 1 s. 3. shake off excess liquid. 4. place the test strip on the strip holder (with an activated reaction time of 60 s). 5. read the test result once the reaction time has elapsed.

Contact

For further inquiries, please contact us:

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Results for doped spinach samples determined using the QUANTOFIX® Relax:

Sample	Doped quantity [mg/L]	Quantity shown on the display [mg/L]	Recovery rate [%]
1	0.5	0.6	120
1	2	2.1	105
1	10	10.9	109
1	20	22.0	110
2	0.5	<0.5	-
2	2	1.9	95
2	10	10.2	102
2	20	20.8	104