Application note QUANTOFIX® Nitrate 250

Rev. 00, Mai 2025

Determination of nitrate in buttermilk

Overview	
Parameter	Nitrate
Test	QUANTOFIX® Nitrate 250 (REF 91366)
General	The determination of nitrate in dairy products is necessary for dairies in order to detect and, if necessary, remove undesirable nitrate levels. In order to obtain correct results with the QUANTOFIX® Nitrate 250 test strip, we recommend an adapted measuring method for measurements in buttermilk.

Sample preparation, performance and calculation of the result

Implementation	
	Dilute the sample to be analyzed 1:1 with deionized water.

Evaluation	
Visual evaluation	1. dip the test strip into the sample for 3 s. 2. shake off excess liquid. 3. wait for 120 s. 4. compare the test strip to the color scale and recalculate result. **Calculation:** Nitrate content [mg/L] = masured color scale value [mg/L] × 2
On the QUANTOFIX® Relax (version 3)	1. select the NO_3 250 method. 2. dip the test strip into the sample for 3 s. 3. shake off excess liquid. 4. wait for 60 s. 5. place the test strip on the test strip holder (with the reaction time of 60 s switched on). 6. read the test results once the reaction time has elapsed and recalculate. **Calculation:** Nitrate content [mg/L] = masured color scale value [mg/L] × 2

Contact

If you have any further questions, please do not hesitate to contact us:

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

Sample	Doped quantity [mg/L]	Quantity shown on the display [mg/L]	Corresponds to calculated quantity [mg/L]	Recovery rate [%]
1	20	10	20	100
1	100	50	100	100
1	200	101	202	101
1	400	199	398	100
2	20	12	24	120
2	100	49	98	98
2	200	96	196	98
2	400	183	366	92

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