

Application Note

Determination of Nitrite in Buttermilk

Overview	
Parameter	Nitrite
Test	QUANTOFIX® Nitrite 25 (REF 91367)
General Information	The determination of nitrite in dairy products is necessary for dairies 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 buttermilk.



Sample Preparation, Procedure, and Calculation of Results

Procedure

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

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.

Calculation: Nitrite content [mg/L] = measured color scale value [mg/L] × 2

- 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.

Calculation: Nitrite content [mg/L] = QUANTOFIX® Relax measurement result [mg/L] × 2

Contact

If you have 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	1	0.6	1.2	120
1	4	1.8	3.6	90
1	10	4.7	9.4	94
1	20	10.3	20.6	103
1	40	18.8	37.6	94
2	1	0.5	1.0	100
2	4	1.9	3.8	95
2	10	4.6	9.2	92
2	20	9.7	19.4	97
2	40	20.5	41.0	103