

## **Technical Datasheet**

Analysis Name: Nitrite by Spectrophotometer and Nitrate by HPLC

Method Number: LI-SGRL-99.026

Scope of Application: This method applies to liquid and powdered milk, infant and

dietetic products, whole and demineralized whey powder, caseins, caseinates, fruits and vegetables, water, chocolate, gummy-based vitamins and colored food matrices. Oils, gelatin,

and collagen are out of scope for this method.

**Description:** Nitrites and nitrates are extracted from the sample using hot

water. Fat and protein substances are eliminated through clarification of the product using various solutions. Nitrite is

reacted with an indicator. The red complex formed is

determined by spectrophotometric measurement at 540 nm. For nitrates, the solution is filtered, run on an HPLC, and read

using UV detection at 205 nm.

Sample Weight 50 g

**Required:** 

**Analytical Platform:** Spectrophotometer, HPLC

**Special Information:** We offer external testing alternatives if needed.

| Analyte  | Alias | Unit of | Limit of Quantification              | Reproducibility |
|----------|-------|---------|--------------------------------------|-----------------|
| Reported |       | Measure |                                      |                 |
| Nitrate  |       | mg/kg   | 4                                    | 20%             |
| Nitrite  |       | mg/kg   | 0.3<br>0.5 – (colored food matrices) | 20%             |