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| Simplified analysis of total sulfite in foodstuffs | |
| [Free white paper](http://www.metrohm.com/products-overview/ion_chromatography/fast-QC-with-ion-chromatography-sulfites/WP-sulfite-determination) presents two improved IC methods | |
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Herisau, April 2021.  
Determination of total sulfite in liquid and solid foodstuffs is a critical, yet challenging application. [A free Metrohm white](http://www.metrohm.com/products-overview/ion_chromatography/fast-QC-with-ion-chromatography-sulfites/WP-sulfite-determination) paper presents 2 improved methods for simplified sulfite analysis using ion chromatographic separation followed by amperometric (method 1) and conductivity detection (method 2). While method 2 is ideally suited for higher sulfite concentrations in foods with low organic load, method 1 excels due to detection limits as low as 0.2 mg/kg as well as outstanding signal stability and repeatability of results for almost all food matrices and varying sulfite concentrations.

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| Current methods for sulfite analysis are either complex to apply and not reliable (Monier-Williams method) or require frequent cleaning of the working electrode (electrochemical detection applying direct current after ion chromatographic separation). The improved IC methods presented in the present white paper excel due to several reasons:   * A more alkaline stabilization solution is used in method 1 allowing the determination of total sulfite in almost all food matrices. * A high capacity anion exchange column is used instead of an ion exclusion column for short, stable retention times and good peak shapes. * Method 1 uses amperometric detection applying a special potential sweep (patent filed) that completely reconditions the electrodes after only 2 minutes thus overcoming the otherwise required frequent cleaning.   [The white paper](http://www.metrohm.com/products-overview/ion_chromatography/fast-QC-with-ion-chromatography-sulfites/WP-sulfite-determination) can be downloaded free of charge from the Metrohm website. | The white paper presents two improved IC methods for total sulfite analysis in foodstuffs. |

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| ****Keywords:**** | Total sulfite analysis, foodstuffs, beverages, ion chromatography |
| ****Branches:**** | Food industry, beverage industry |
| ****Image:**** |  |

About Metrohm  
Metrohm is one of the world’s most trusted manufacturers of high-precision instruments for laboratory and process analysis. The company was founded in 1943 by engineer Bertold Suhner in Herisau, Switzerland, where it is headquartered to this day. Metrohm offers a compre-hensive portfolio of analytical technologies ranging from titration and ion chromatography to near-infrared and Raman spectroscopy, as well as several other techniques. Metrohm sells its products and provides services through its own local subsidiaries and exclusive distribu-tors in more than 120 countries worldwide. Our mission in a nutshell is helping customers from virtually every industry analyze and maintain the quality of their products at every stage in the manufacturing process and beyond. Since 1982, Metrohm has been owned 100% by the non-profit Metrohm Foundation. This foundation keeps to its purpose to support charitable, philanthropic, and cultural projects in eastern Switzerland and, above all, ensure the independence of the company.

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