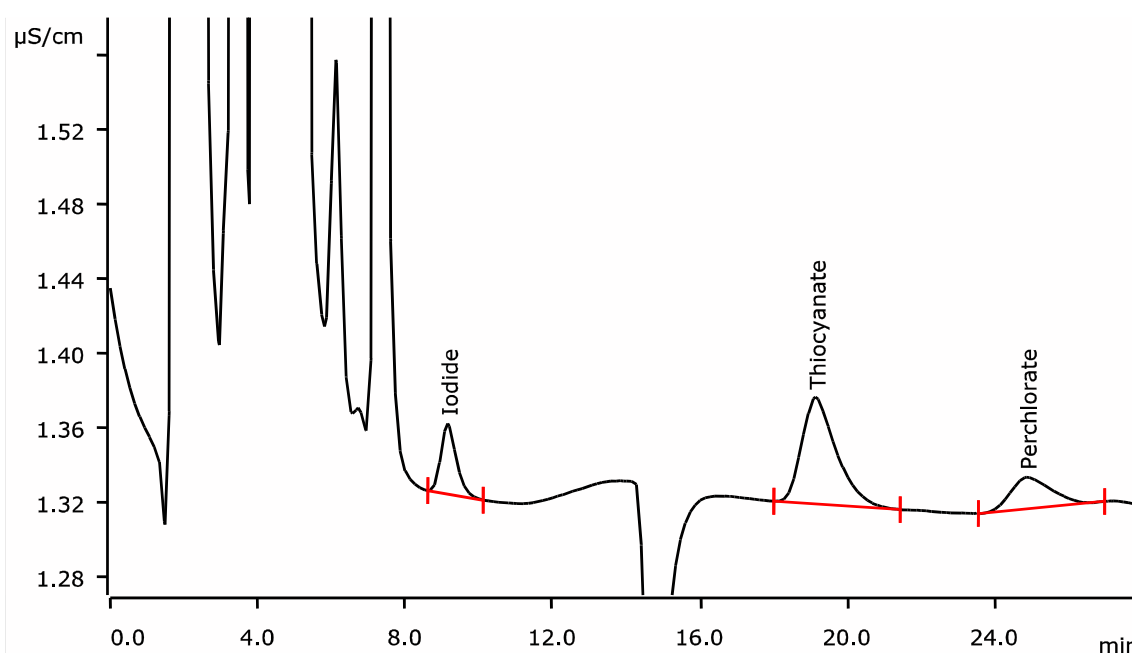


# Iodide, thiocyanate, and perchlorate in milk applying Inline Dialysis



Anion analysis in milk requires a sophisticated sample preparation to avoid column fouling by fats or proteins. Here Metrohm Inline Dialysis is the perfect automated technique. In dairy products, iodide, thiocyanate, and perchlorate need to be determined regularly for health and hygiene reasons. This application allows for the first time to analyze these three components in this matrix within one run.

## Results

Anion	[µg/L]	Spike (500 µg/L)	Recovery [%]
Iodide	n.d.	554	111
Thiocyanate	402	918	103
Perchlorate	n.d.	479	96

Spiked chromatogram is shown.

# Method description

## Sample

Milk, 3.5% fat

## Sample preparation

Metrohm Inline Dialysis

## Column

Metrosep A Supp 15 - 50/4.0	6.1030.450
Metrosep A Supp 15 Guard/4.0	6.1030.500

## Solutions

Eluent	4.0 mmol/L sodium carbonate 6.0 mmol/L sodium hydrogen carbonate 10% methanol
Regenerant	100 mmol/L sulfuric acid
Rinsing solution	Ultrapure water

## Analysis

Suppressed conductivity

## Parameters

Flow rate	0.8 mL/min
Injection volume	20 µL
P <sub>max</sub>	15.0 MPa
Recording time	30 min
Column temperature	45 °C

## Instrumentation

850 Professional IC Anion – MCS – Prep 1	2.850.2110
858 Professional Sample Processor – Pump – Injector	2.858.0020

