Metrohm Columns and their application

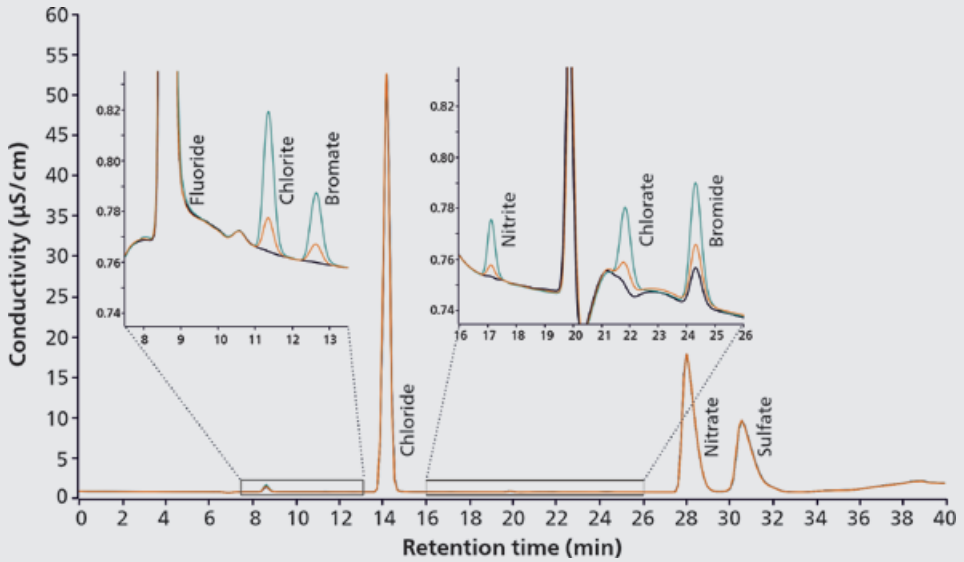
Determination of disinfection by-products

Chlorite, bromate and chlorate are disinfection byproducts, which are formed during the drinking water purification process. Bromate is known to be carcinogenic and must therefore be monitored with care. Multiple norms and standards describe the determination of these oxyhalides next to the standard anions in such water matrices (e.g. US EPA 300.1 A and B and DIN ISO 10304-4-1997). The standard technology for their determination is anion exchange chromatography.

Metrohm

Metrosep A Supp 18 – new possibilities with hydroxide eluents

The Metrosep A Supp 18 column is the first Metrohm column to allow the determination of these compounds in combination with a hydroxide eluent. The Metrosep A Supp 18 excels by its very high resolution between chlorite, bromate and chloride. Therefore, it is the ideal candidate whenever low concentrations of oxyhalides need to be determined next to higher concentrations of chloride.



Metrosep A Supp 18 - 250/4.0: 13-52 mmol/L potassium hydroxide gradient, column temperature 30°C, sample volume 100 µL, flow 0.5 mL/min, inline ultrafiltration, sequential suppression, conductivity detection. Sample: Metrohm tap water unspiked (black), with 5 µg/L spike (blue) and with 20 µg/L spike (green).

Besides the oxohalides, the Metrosep A Supp 18 enables …

- a new flexibility to work with hydroxide eluent gradients to tune the separation to your application needs;
- the determination of the 5 haloacetic acids (HAA5): monochloroacetate (MCA), monobromoacetate (MBA), dichloroacetate (MCA), dichloroacetate (DCA) and trichloroacetate (TCA);
- new separation selectivities due to hydroxide selective chemistry.

Did you know that all Metrohm columns …

- can be used with instruments from third party manufacturers as well.
- Offer a wide choice of different lengths and capacities to fulfill your application wishes.
- Record the number of injections and working hours of each column.
- Can be used with organic modifiers such as acetone, acetonitrile, and methanol.
- Offer robust Swiss Quality for a long column life.

ORDERING INFORMATION

6.01033.420	Metrosep A Supp 18 - 150/4.0	
6.01033.430	Metrosep A Supp 18 - 250/4.0	
6.01033.500	Metrosep A Supp 18 Guard/4.0