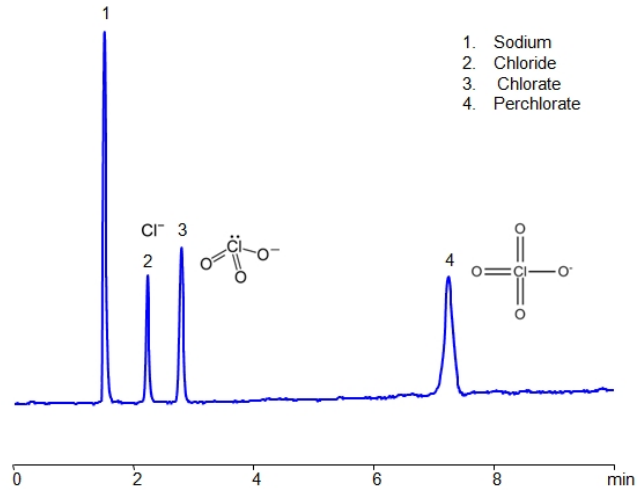
HPLC Determination of Chloride, Chlorate and Perchlorate on Newcrom B Column



Column:	Newcrom B
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	MeCN - 10%
Buffer:	Gradient AmFm pH 3.0 - 40-100 mM, 10 min
Flow rate:	1.0 ml/min
Detection:	CAD
Injection volume:	5 µL

High Performance Liquid Chromatography (HPLC) Method for Analysis of Chlorate , Perchlorate , Sodium Chlorate , Chloride

Main source of contamination of environment by perchlorates are rocket fuels, car airbags, and fireworks. EPA developed regulation of the perchlorate level in drinking water which already adapted by several states.HPLC analysis of [compound] with Newcrom B . Includes separation method, chromatogram, and mobile phase. The most convenient, universal and very sensitive way to measure perchlorate is chromatography. SIELC developed a simple, rugged, and selective HPLC method which allows to measure perchlorate in different matrices including drinking water. This method allows to measure simultaneously other chloro containing ions such as chloride, and chlorate. The method shows high selectivity and specificity. The mobile phase is a simple mixture of water acetonitrile and ammonium formate. The column used in the analysis has advanced surface chemistry with long chain holding a terminal positively changed functional group.

Method Parameters

Column	Newcrom B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H2O – 10/90%
Buffer	Gradient AmFm pH 3.0 – 40-100 mM , 10 min
Flow Rate	1.0 mL/min
Detection	CAD

Quelle: https://sielc.com/hplc-determination-of-chloride-chlorate-and-perchlorate

AugustaChrom - Dr. Roland Kießwetter
Tel.: +49 821 599 783 70
Fax: +49 821 599 783 71
E-Mail: info@hplc-shop.de