

Determination of Inorganic Anions in Environmental Waters Using a Compact Ion Chromatography System

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Key Words

Dionex Integriion RFIC System, Dionex IonPac AS18 Column, Dionex EGC 500 KOH Eluent Generator, Drinking Water, Fluoride, Chloride, Sulfate

Introduction

This application proof note demonstrates a method for the determination of inorganic anions in a municipal drinking water system, which is based on the method published in Application Note 154.¹ In this proof note, the method is performed using a Thermo Scientific™ Dionex™ Integriion™ ion chromatography (IC) system, which provides the analyst with the latest in IC technology for efficient sample analysis and data generation.

Method

IC System:	Thermo Scientific Dionex Integriion RFIC system		
Columns:	Thermo Scientific Dionex IonPac AG18 Guard (4 × 50 mm) Thermo Scientific Dionex IonPac AS18 Analytical (4 × 250 mm)		
Eluent:	50 mM KOH		
Gradient:	Retention Time [min]	Flow [mL/min]	Concentration [mM]
	0.0	1.0	15.0
	0.2	1.0	15.0
	6.0	1.0	44.0
	9.0	1.0	44.0
	9.0	1.0	15.0
Flow Rate:	1.0 mL/min		
Injection Volume:	10 µL		
Temperature:	30 °C		
Detection:	Suppressed conductivity, Thermo Scientific™ Dionex™ AERS™ 500 suppressor, 4 mm, 109 mA, recycle mode		

Reference

1. Thermo Scientific Application Note 154: Determination of Inorganic Anions in Environmental Waters Using a Hydroxide-Selective Column. Sunnyvale, CA [Online] <http://www.thermoscientific.com/content/dam/tfs/ATG/CMD/cmd-documents/sci-res/app/chrom/ic/col/AN-154-IC-Inorganic-Anions-Environmental-Waters-AN71372-EN.pdf> (accessed Jan. 7, 2016)

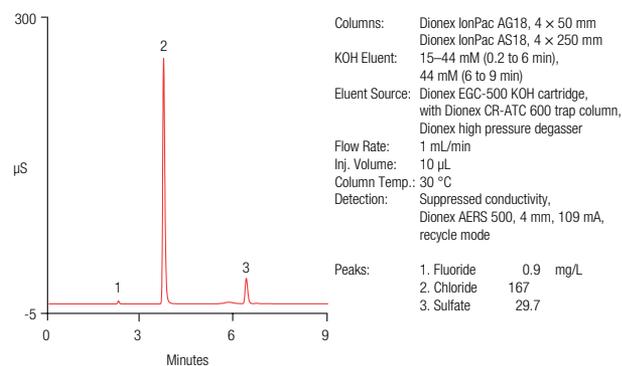


Figure 1. Anions in a Municipal Drinking Water Sample Using a Compact IC.

For application support, visit the [AppsLab Library](#) where you can find detailed method information, chromatograms and related compound information. All the information needed to run, process and report the analysis is available in ready-to-use eWorkflows, which can be executed directly in your chromatography data system. www.thermoscientific.com/appslab



www.thermoscientific.com/integriion

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AB71918-EN 0116S



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