Waters™

Nota de aplicación

Asulam in River Water

Waters Corporation

This is an Application Brief and does not contain a detailed Experimental section.

Abstract

This application brief demonstrates analysis of asulam in river water.

Introduction

The compound analyzed in this study is asulam.

$$H_2N$$
 \longrightarrow
 S
 NH
 S
 $COOCH_3$

ASULAM

Experimental

LC-MS Conditions

Column: Atlantis d C_{18} , 2.1 x 100 mm, 3 μm

Part number: 1860001295

Mobile phase A: 15 mM Ammonium formate, pH 4.5

Mobile phase B: Acetonitrile

Flow rate: 200 µL/min

Injection volume: 20 µL

Instrument: Alliance 2695 Separations Module

Gradient

Time (min)	Profile	
	%A	%B
0	90	10
19	10	90

MS Conditions

Instrument: Micromass Quattro

Ion source: Electrospray positive and negative

Mode: Multiple Reaction Monitoring

Source temp.: 150 °C

Desolvation temp.: 450 °C

Cone Gas: 50 L/Hr

Desolvation gas: 500 L/hr

Collision Gas: Argon

MRM	Cone	Coll. energy
(ESI+)	(V)	(eV)
231‡156	30	10
MRM	Cone	Coll. energy
(ESI+)	(V)	(eV)

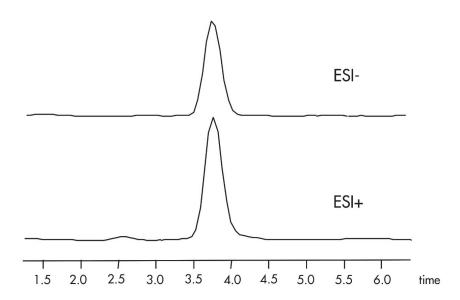
OASIS® MCX EXTRACTION METHOD

Oasis® MCX Extraction Cartridge, 6 cc/150 mg (LP)
Part Number: 186000255

PREPARE SAMPLE: acidify to pH 2.7 **CONDITION:** 5 mL methanol/1 mL water LOAD: 250 mL sample (5 mL/min) WASH: 2 mL 5% MeOH/water **ELUTE:** $2.5 \text{ mL MeOH/MTBE/NH}_{1}\text{OH}(22:75:3)$ **EVAPORATE AND RECONSTITUTE:** 250 µL 20% acetonitrile

Results and Discussion

250 ng/L SPIKED RIVER WATER



Asulam recovery 1 (n=4)		
50 ng/L	81%(14%RSD)	
250 ng/L	78%(7.6%RSD)	
1000 ng/L	71%(12%RSD)	

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