Waters[™]

Application Note

Carbamates in Drinking Water (Endocrine Disruptors)

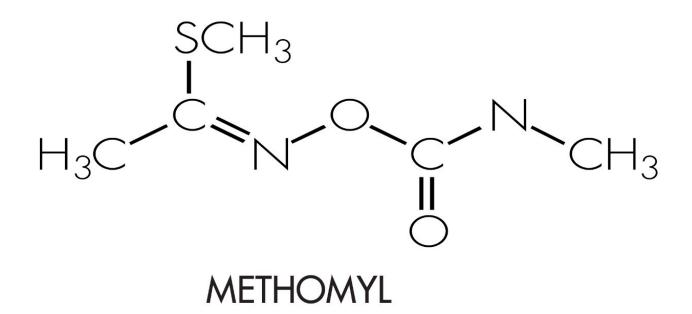
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This is an Application Brief and does not contain a detailed Experimental section.

Abstract

This application brief demonstrates the analysis of carbamates in drinking water.

Introduction



Experimental

HPLC Method

Column:	Waters Carbamate Analysis, 3.9 x 150 mm	
Mobile phase A:	Water	
Mobile phase B:	Methanol	
Mobile phase C:	Acetonitrile	
Flow rate:	1.5 mL/min	
Injection volume:	75 μL	

Sample:

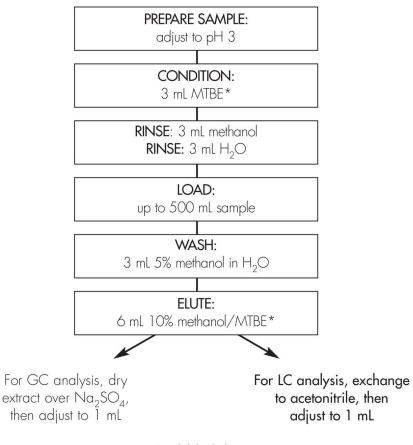
200 mL of drinking water spiked @ 50 ng/L

Detection:

Post Column Derivatization, fluorescence

OASIS® SPE METHOD FOR ENDOCRINE DISRUPTORS

Conditions for Oasis® HLB Cartridge, 6 cc, 200 mg Part Number WAT106202

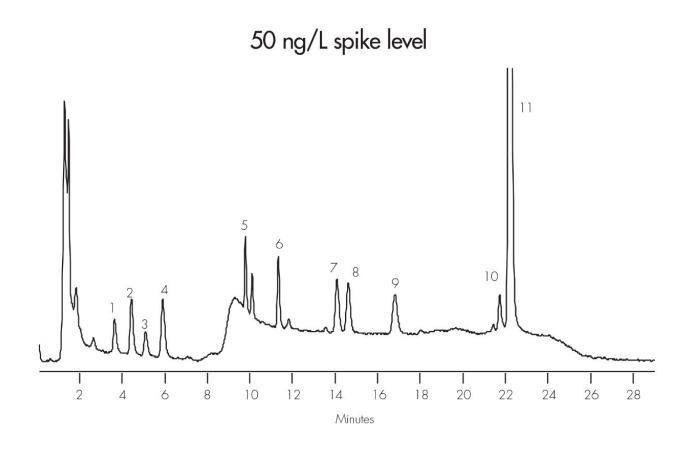


 $\ensuremath{^*}\xspace$ methyl
 <code>tbutyl</code> ether diethyl ether can be used as an alternative to MTBE

Results and Discussion

Compounds	%Recovery	
	LC/PCFD*	LC/PCFD
	500 ng/L	50 ng/L
1. Aldicarb sulfoxide	54.7 (0.5)	45.7 (5.1)
2. Aldicarb Sulfone	98.7 (4.0)	101 (3.6)
3. Oxamyl	90.8 (7.0)	122 (18)
4. Methomyl	99.9 (6.4)	100 (3.2)
5.3-Hydroxycarbofuran	98.7 (2.3)	111 (6.5)
6. Aldicarb	90.7 (9.3)	104 (5.8)
7. Propoxur	97.5 (5.6)	99.9 (5.8)
8. Carbofuran	97.2 (4.7)	104 (7.9)
9. Carbaryl	89.6 (2.2)	122 (11)
10. Methiocarb	91.6 (2.2)	120 (14)

* The 500 ng/L sample SPE extracts were split and analyzed by each method LC/PCDF - LC with post column derivitization and fluorescence detection.



Featured Products

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