## Waters™

## Applikationsbericht

# Carbamates in Drinking Water (Endocrine Disruptors)

| Waters | Corporation |
|--------|-------------|
|--------|-------------|

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

SCH<sub>3</sub>

$$H_3C$$

$$C > N$$

$$C > N$$

$$C > C$$

$$C > N$$

$$C > C$$

## 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

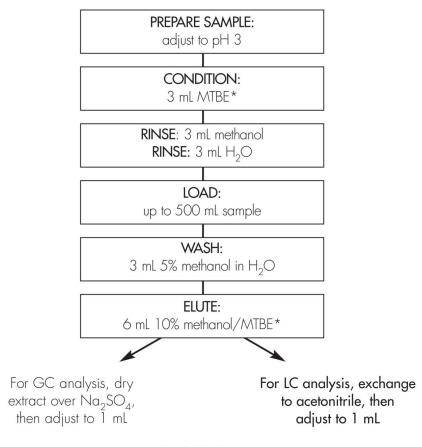
Injection volume: 75 µL

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

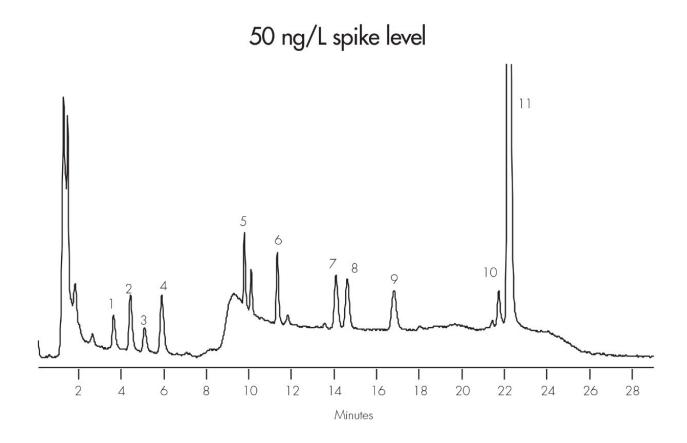


\* methyl tbutyl ether diethyl ether can be used as an alternative to MTBE

## 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)   |

<sup>\*</sup> 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**

WA31764.49, June 2003

© 2022 Waters Corporation. All Rights Reserved.