

CARBAMATES IN DRINKING WATER (ENDOCRINE DISRUPTORS)

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: Injection volume: Sample: Detection:	 1.5 mL/min 75 μL 200 mL of drinking water spiked @ 50 ng/L Post Column Derivatization, fluorescence



OASIS® SPE METHOD FOR ENDOCRINE DISRUPTORS

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



extract over Na_2SO_4 , then adjust to 1 mL For LC analysis, exchange to acetonitrile, then adjust to 1 mL

* methyl *t*butyl ether diethyl ether can be used as an alternative to MTBE

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)

 \ast The 500 ng/L sample SPE extracts were split and analyzed by each method

 $\operatorname{LC/PCDF}$ - LC with post column derivitization and fluorescence detection

