Endocrine Disruptors in Soil

HPLC Method

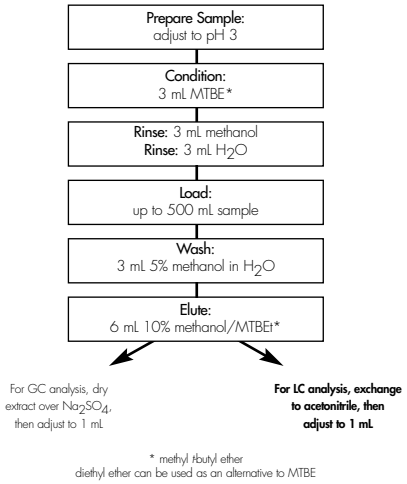
Column: Symmetry® C_{18}, 3.9 x 150 mm, 5 µm
Part number: WAT046970
Mobile Phase A: 10 mM phosphate pH 6.8
Mobile Phase B: Methanol
Gradient:

Time (min)	Profile %A	%B
0	60	40
20	0	100

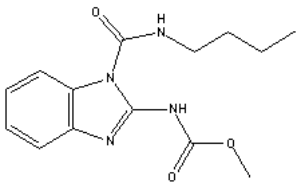
Flow Rate: 1.0 mL/min
Injection volume: 100 µL
Sample: 10 g potting soil extracted with 25 mL acetonitrile; then SPE on Oasis® HLB
Detection: PDA (225 nm extracted, 0.04 AUFS)

Oasis® SPE Method for Endocrine Disruptors

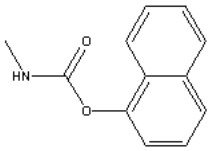
Conditions for Oasis® HLB Cartridge, 6 cc, 200 mg
Part Number WAT106202



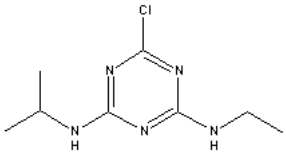
* methyl *t*butyl ether
diethyl ether can be used as an alternative to MTBE



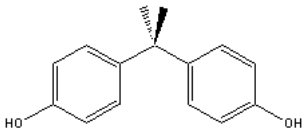
1. Benomyl



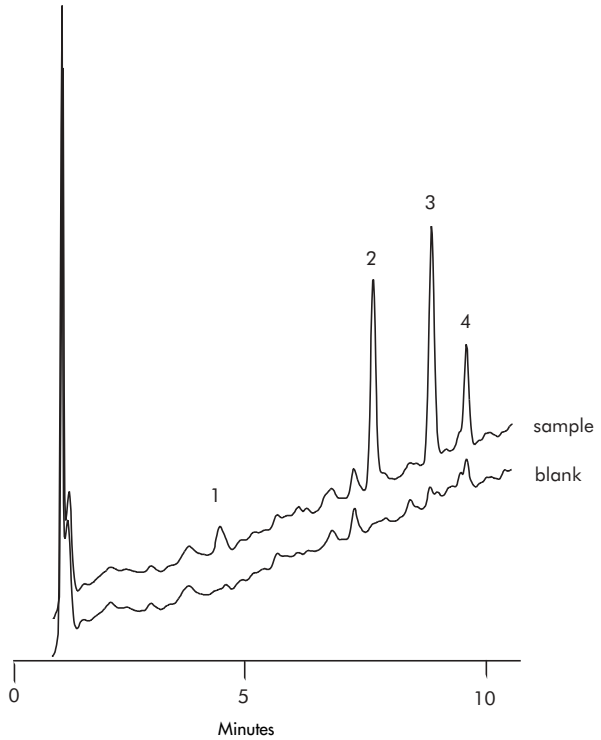
2. Carbaryl



3. Atrazine



4. Bisphenol A



50 ppb spike level

Compounds	% Recovery ± % RSD
1. benomyl	62 ± 6
2. carbaryl	91 ± 4
3. atrazine	84 ± 5
4. bisphenol A	78 ± 6

Soil samples (5 g) were spiked with the appropriate compounds and extracted with 25 mL of acetonitrile (30 minutes on shaker). A 5 mL aliquot of the acetonitrile extract was diluted to 100 mL with reagent water (MilliQ) and then processed by SPE.