Waters™

應用手冊

Acidic Herbicides in Drinking Water

Waters Corporation

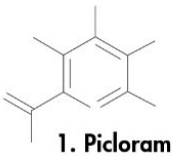
This is an Application Brief and does not contain a detailed Experimental section.

Abstract

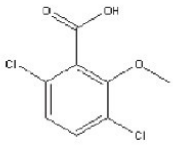
This application brief highlights the analysis of acidic herbicides in drinking water using SymmetryShield columns.

Introduction

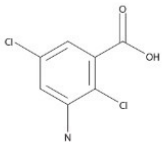
Compounds used in this study includes: 1. Picloram 2. Dicamba 3. Chloramben 4. 4-Nitrophenol 5. Bentazon 6. 2,4-D 7. MCPA 8. Dichlorprop 9. 2,4,5-T 10. MCPP 11. 3,5-Dichlorobenzoic 12. 2,4-DB 13. 2,4,5-TP 14. Acifluorfen 15. Dinoseb.



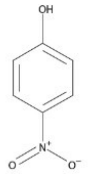
1. Picloram



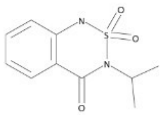
2. Dicamba



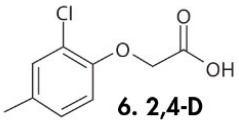
3. Chloramben



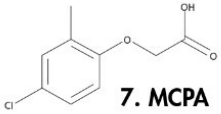
4. 4-Nitrophenol



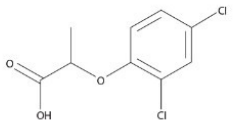
5. Bentazon



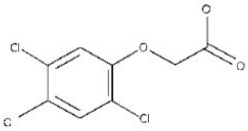
6. 2,4-D



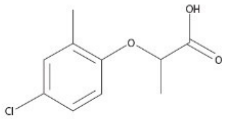
7. MCPA



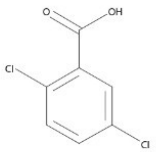
8. Dichloroprop



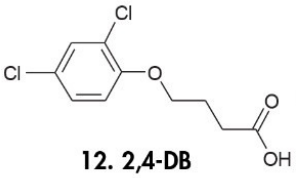
9. 2,4,5-T



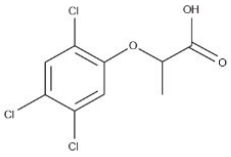
10. MCPP



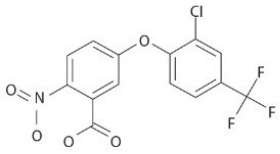
11. 3,5-Dichlorobenzoic acid



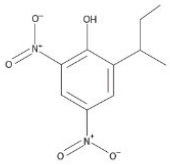
12. 2,4-DB



13. 2,4,5-TP



14. Acifluorfen



15. Dinoseb

Experimental

HPLC Method

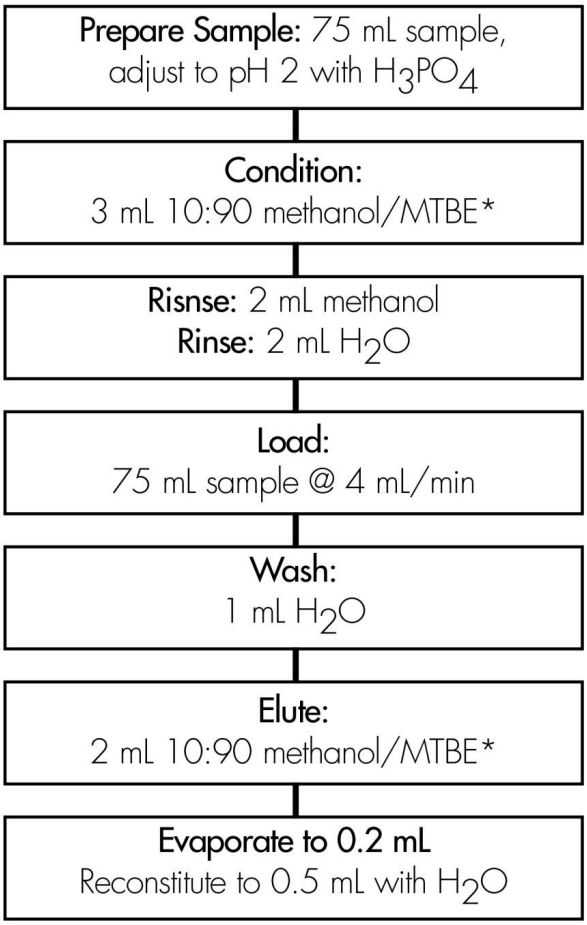
Column:	SymmetryShield RP_8, 3.9 x 150 mm, 5 µm (p/n: WAT200655)
Mobile phase A:	13 mM phosphate buffer, pH 3.4
Mobile phase B:	Acetonitrile
Flow rate:	1.0 mL/min
Injection volume:	75 µL
Detection:	UV @ 230 nm (0.015 AUFS)

Gradient

Time (min)	Profile	
	%A	%B
0	85	15
8	70	30
15	70	30
30	40	60
35	10	90

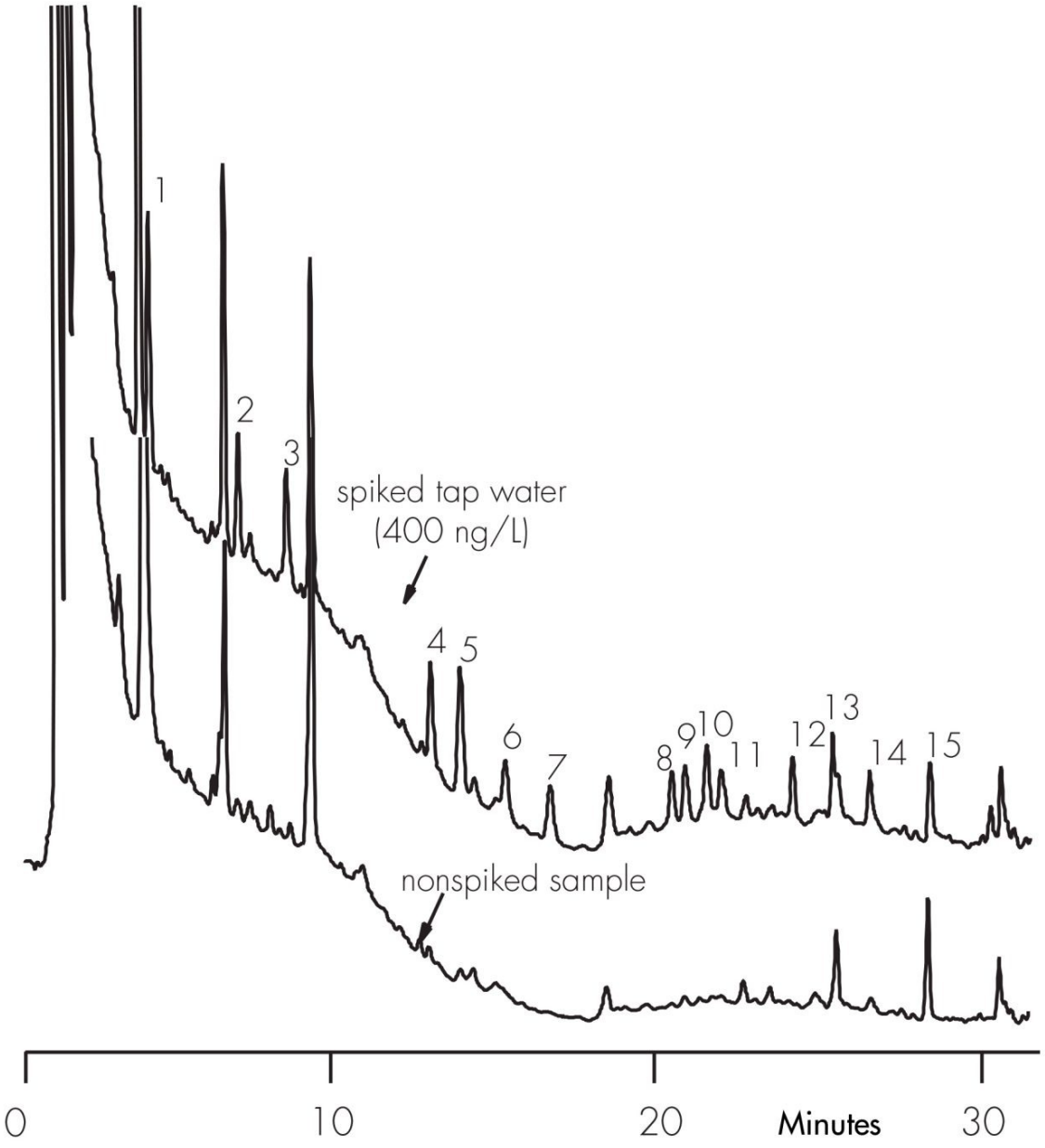
Oasis® HLB Extraction Method

Conditions for Oasis® HLB Cartridge, 3 cc, 60 mg
Part Number WAT094226



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

Results and Discussion



Featured Products

- Alliance HPLC <https://www.waters.com/514248>

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