

## DETERMINATION OF CLOPYRALID AND TRICLOPYR IN RIVER WATER

### HPLC/MS METHOD

**COLUMN:** XTerra® MS C<sub>18</sub> 2.1 x 100 mm, 3.5 µm  
**PART NUMBER:** 186000404  
**MOBILE PHASE A:** 10 mM TFA, pH 2.1  
**MOBILE PHASE B:** ACN  
**GRADIENT:**

Time (min)	%A	%B
0.0	75	25
6.0	10	90

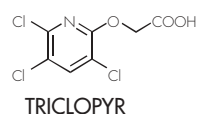
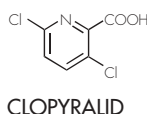
**FLOW RATE:** 0.2 mL/min  
**INJECTION VOLUME:** 20 µL  
**DETECTION:** MS ESI<sup>+</sup>  
 Multiple Selected-Ion Recording (SIR)  
**INSTRUMENT:** Alliance® 2695, Micromass® ZQ™

### HPLC/UV METHOD

**COLUMN:** XTerra® RP<sub>18</sub> 4.6 x 100 mm, 3.5 µm  
**PART NUMBER:** 186000438  
**MOBILE PHASE A:** 10 mM TFA, pH 2.1  
**MOBILE PHASE B:** ACN  
**GRADIENT:**

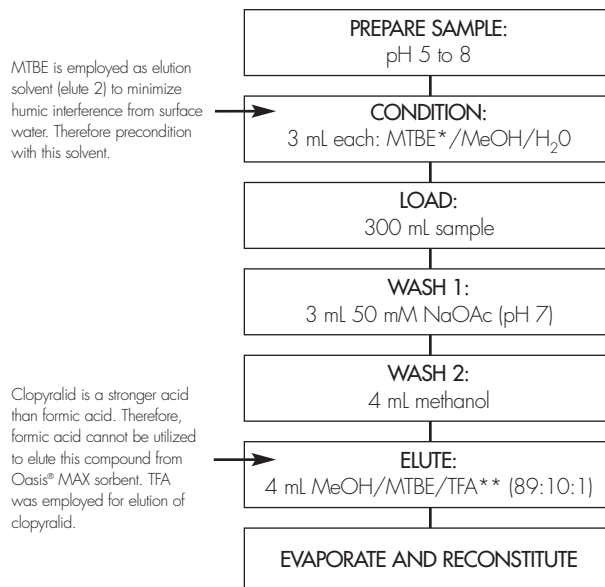
Time (min)	%A	%B
0.0	80	20
20.0	20	80

**FLOW RATE:** 1.0 mL/min  
**INJECTION VOLUME:** 50 µL  
**DETECTION:** UV @ 290 nm  
**INSTRUMENT:** Alliance® 2695, 2996 PDA



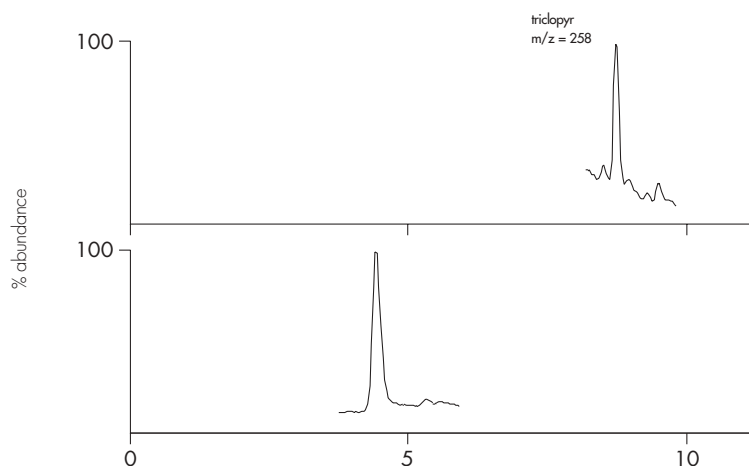
### OASIS® MAX EXTRACTION METHOD

Conditions for Oasis® MAX Cartridge, 6 cc, 500 mg  
 Part Number 186000865



\* methyl tbutyl ether  
 diethyl ether can be used as an alternative to MTBE  
 \*\* TFA - trifluoroacetic acid

0.4 µg/L spike level - river water



COMPOUNDS	% Recovery (% Recovery ± % RSD, n=5)			
	Drinking Water		River Water	
1. Clopyralid	0.4 µg/L	2.0 µg/L	0.4 µg/L	2.0 µg/L
2. Triclopyr	100 (8)	110 (4)	94 (5)	110 (2)
	85 (3)	87 (2)	82 (11)	81 (8)

