

## Herbicides

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Waters Corporation



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

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## Abstract

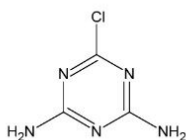
This application brief highlights the analysis of herbicides used in weed control.

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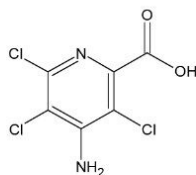
## Introduction

Compounds used in this study:

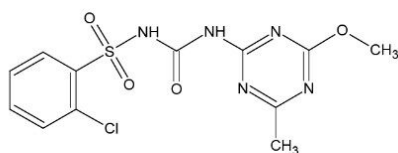
1. Atrazine-desethyl-desisopropyl
2. Picloram
3. Chlorsulfuron (unknown impurity)
4. Atrazine
5. 2,4-D



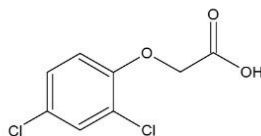
**Atrazine-desethyl-desisopropyl**



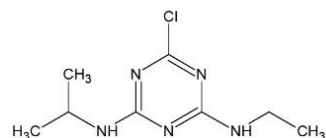
**Picloram**



**Chlorsulfuron**



**(2,4-Dichlorophenoxy)acetic Acid**



**Atrazine**

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## Experimental

### Conditions

Column:

SunFire C<sub>18</sub> 4.6 x 150 mm, 5 μm (p/n: 186002559)

Mobile phase A:

Water

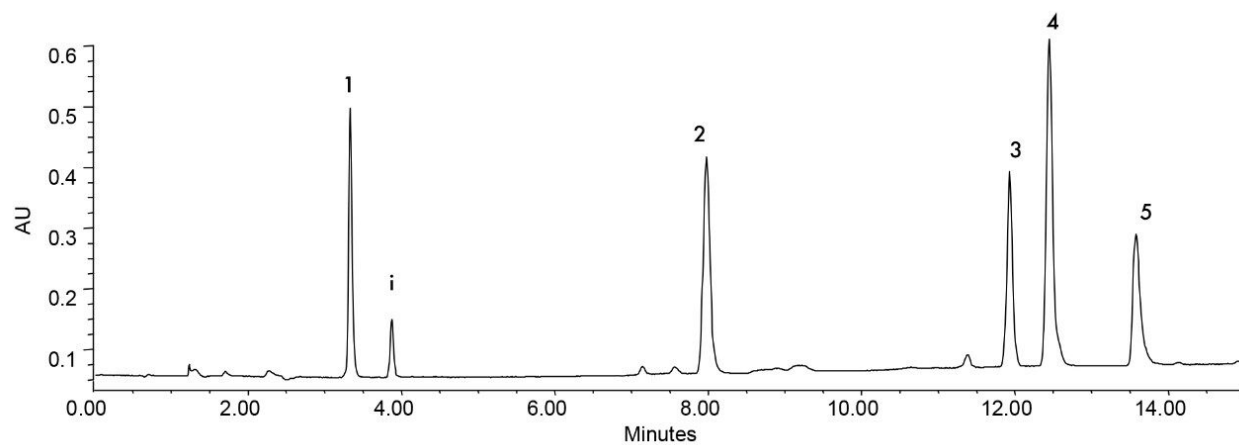
Mobile phase B:	Acetonitrile
Mobile phase C:	100 mM CH <sub>3</sub> COO-NH <sub>4</sub> + pH 4.5
Flow rate:	1 mL/min
Injection volume:	10 µL
Sample concentration:	4 µg/mL in water Chlorsulfuron 8 µg/mL (2,4-Dichlorophenoxy)acetic Acid 40 µg/mL
Temperature:	30 °C
Detection:	UV @ 220 nm
Instrument:	Alliance 2695 with 2996 PDA

## Gradient

Time (min)	Profile		
	%A	%B	%C
0.0	85	5	10
15.0	20	70	10

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## Results and Discussion



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

WA41891, May 2005