

Nota applicativa

## Fungicides in Commercial Apple Cider

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Waters Corporation



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

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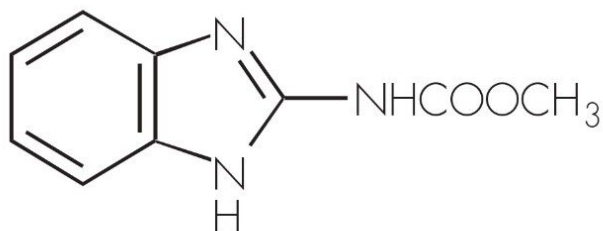
### Abstract

This application brief demonstrates analysis of fungicides in commercial apple cider.

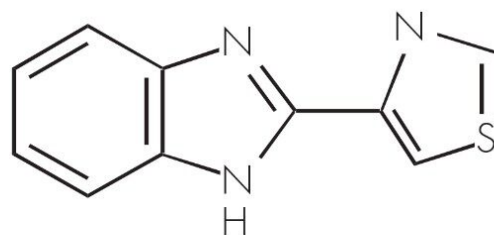
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## Introduction

The compounds analyzed in this study are - Carbendazim(70 µg/L) and Thiabendazole(170 µg/L).



**CARBENDAZIM**



**THIABENDAZOLE**

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## Experimental

### LC Conditions

Column:	Xterra MS C <sub>18</sub> , 2.1 x 100 mm, 5 µm
Part number:	186000450
Mobile phase:	CH <sub>3</sub> CN/10 mM NH <sub>4</sub> HCO <sub>3</sub> , pH 8.3 (20/80)
Flow rate:	200 µL/min, split 1/1 through each detector
Instrument:	Waters Alliance Separations Module with 996 PDA

## MS Conditions

Instrument:

Waters ZQ

Source:

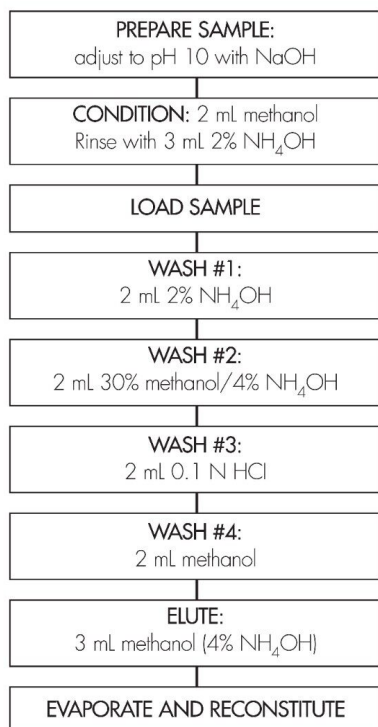
Positive Electrospray (ESI<sup>+</sup>)

Mode:

Multiple Selected-Ion Recording (SIR)

### OASIS® MCX SPE METHOD

Conditions for Oasis® MCX Cartridges, 6 cc/150 mg  
Part Number 186000256

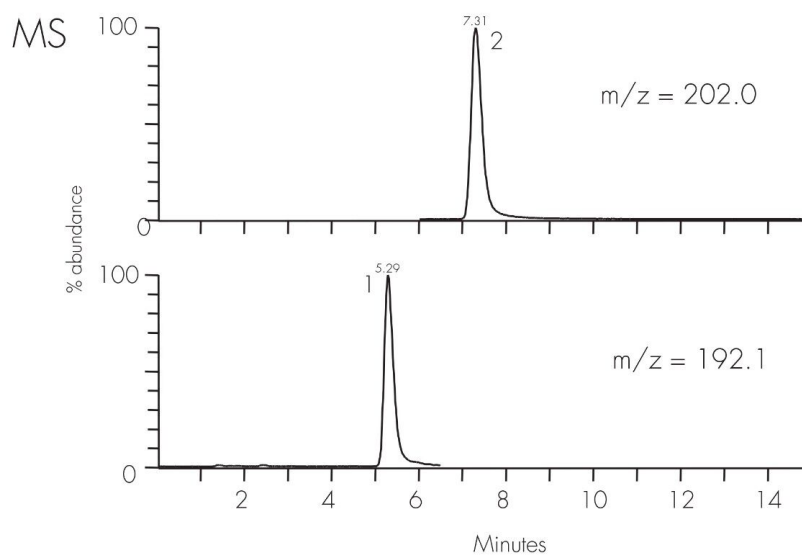
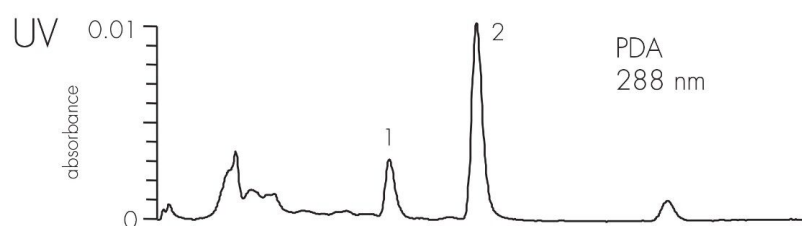


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## Results and Discussion

SIR group	Time (mins)	Compound	Mass	Cone voltage	Dwell time
1	0-6.5	Carbendazim	192.1	25 V	1.0 secs
2	6-15	Thiabendazole	202.0	35 V	1.0 secs

## LC-MS and LC/PDA Chromatograms of Fungicides in Apple Cider




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Alliance HPLC System <<https://www.waters.com/534293>>

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