

Fungicides in Commercial Apple Cider

Waters Corporation



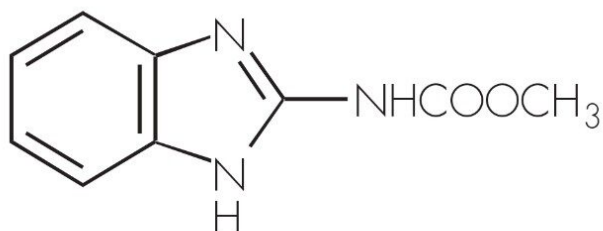
This is an Application Brief and does not contain a detailed Experimental section.

Abstract

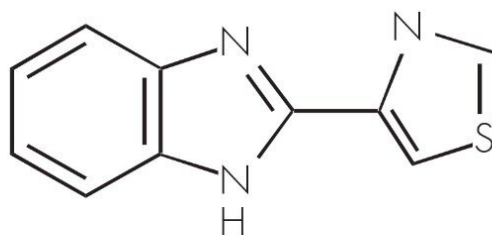
This application brief demonstrates analysis of fungicides in commercial apple cider.

Introduction

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



CARBENDAZIM



THIABENDAZOLE

Experimental

LC Conditions

Column:	Xterra MS C ₁₈ , 2.1 x 100 mm, 5 µm
Part number:	186000450
Mobile phase:	CH ₃ CN/10 mM NH ₄ HCO ₃ , 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:

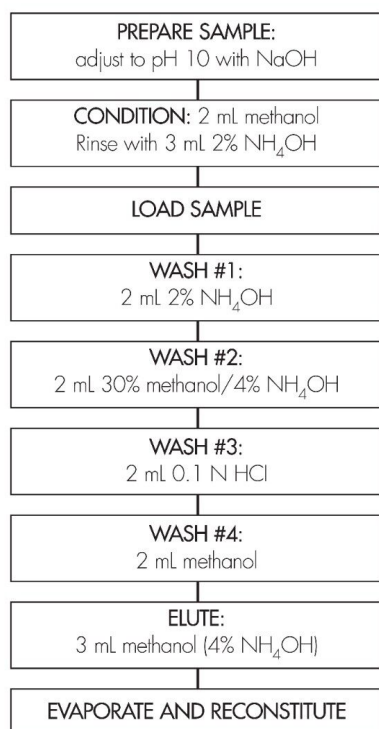
Positive Electrospray (ESI⁺)

Mode:

Multiple Selected-Ion Recording (SIR)

OASIS® MCX SPE METHOD

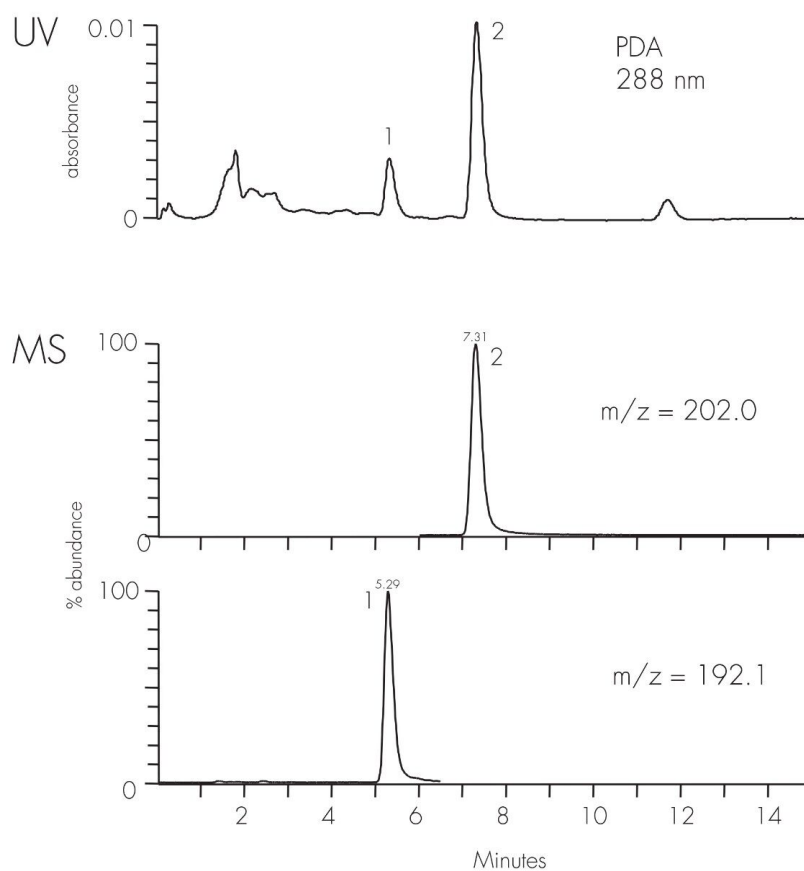
Conditions for Oasis® MCX Cartridges, 6 cc/150 mg
Part Number 186000256



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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