## Waters™

Application Note

# Acidic Veterinary Drugs in Horse Urine - LC-UV

Waters Corporation



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

Abstract

This application brief demonstrates analysis of acidic veterinary drugs in horse urine by LC-UV.

## Introduction

The compounds used in this study are -

- 1. Ketoprofen
- 2. Naproxen
- 3. Phenylbutazone
- 4. Ibuprofen
- 5. Meclofenamic acid

ISTD: Dichlorobenzoic acid

Ibuprofen

Naproxen

Phenylbutazone

# Meclofenamic acid

# Ketoprofen

## Experimental

#### Conditions

Column:

Xterra MS  $C_{18}$  4.6 x 100 mm, 3.5  $\mu m$ 

Part Number: 186000436

Mobile phase A: 0.1% CH<sub>3</sub>COOH

Mobile phase B: MeOH

Flow rate: 1.0 mL/min

Injection volume: 40  $\mu$ L

Detection: UV @ 221nm

Instrument: Alliance 2695, 2996 PDA

#### Gradient

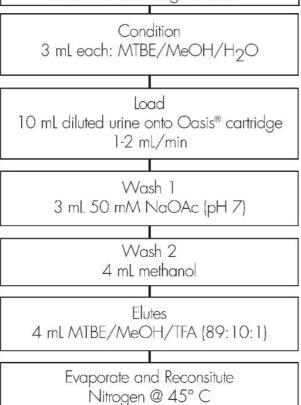
Time (min)	Profile	
	%A	%B
0.0	50	50
2.0	50	50
20.0	40	60
30.0	10	90

Oasis® Method
Oasis® MAX, 6 cc (150 mg)
Extraction Cartridge
Part Number 186000369

#### Prepare Sample

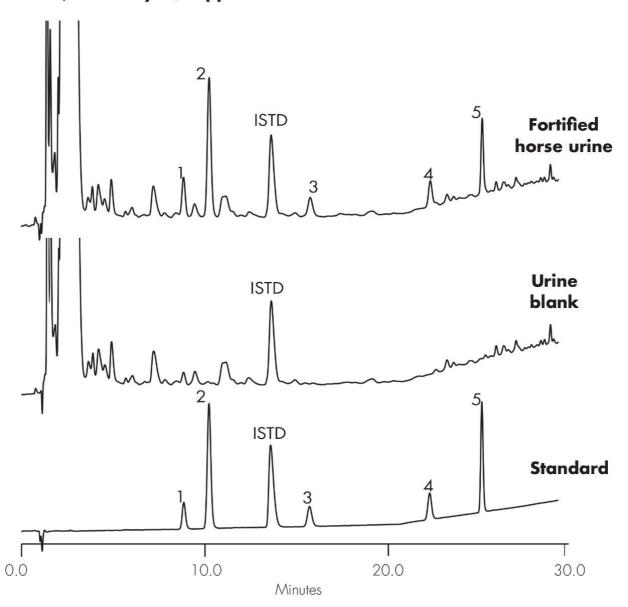
#### Hydrolysis

- add 1 mL of 10M KOH to 10 mL of spiked urine.
- heat at 60° for 15 minutes.
- allow to cool to room temperature
- adjust to pH 2 with H3PO4.
- dilute 1:1 with reagent water



MTBE - methyl t-butyl ether TFA - trifluoroacetic acid





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