

Steroids

Waters Corporation



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

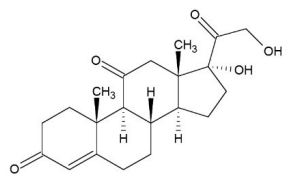
Abstract

This application brief demonstrates analysis of steroids using Sunfire C₁₈ and C₈ Columns.

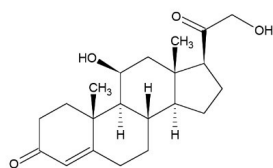
Introduction

The compounds analysed in this study using Sunfire C₁₈ Columns are -

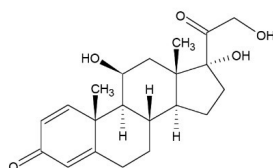
Compounds	USP tailing
1. Prenisolone	na
2. Cortisone	na
3. Corticosterone	0.99
4. Estradiol	1.05
5. Estrone	1.04
6. Progesterone	0.97



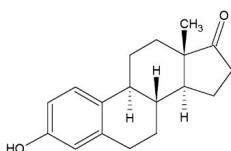
Cortisone



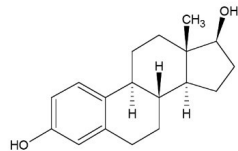
Corticosterone



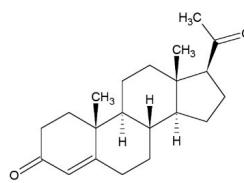
Prednisolone



Estradiol



Estrone



Progesterone

The compounds analysed in this study using Sunfire C₈ Columns are -

Compounds	USP tailing
1. Prenisolone	na
2. Cortisone	na
3. Corticosterone*	0.99
4. Estradiol*	0.96
5. Estrone	0.97
6. *	0.92

*stock solution prepared in acetonitrile

Experimental

Conditions

Column:	SunFire C ₁₈ 4.6 x 20 mm <i>IS</i> , 3.5 µm
Part number:	186002549
Mobile phase A:	Water
Mobile phase B:	Acetonitrile
Flow rate:	3.0 mL/min
Injection volume:	10 µL
Sample concentration:	10 µg/mL in water
Temperature:	30 °C

Detection:

UV @ 220 nm

Instrument:

Alliance 2695 with 2996 PDA

Gradient

Time (min)	Profile	
	%A	%B
0.0	80	20
4.0	36	64

Conditions

Column:

SunFire C₈ 4.6 x 20 mm *IS*, 3.5 µm

Part number:

186002699

Mobile phase A:

Water

Mobile phase B:

Acetonitrile

Flow rate:

3.0 mL/min

Injection volume:

10 µL

Sample concentration:

10 µg/mL in water

Temperature:

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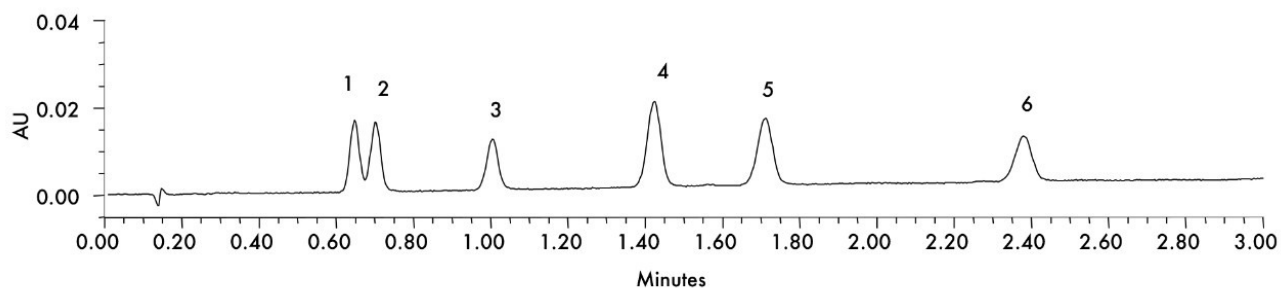
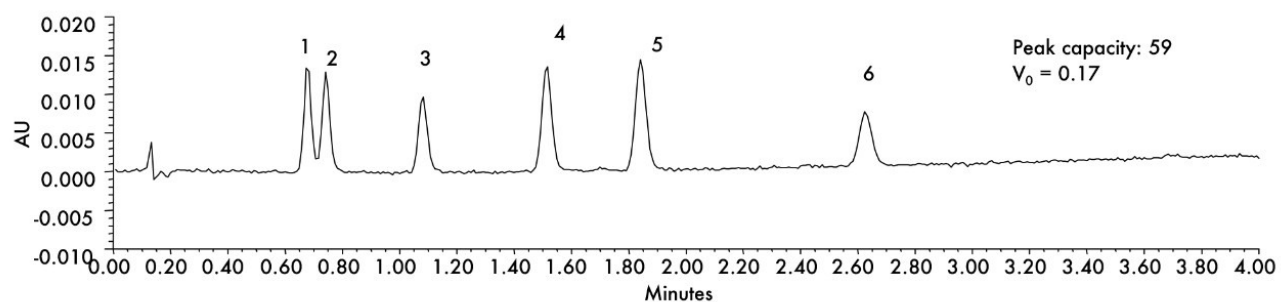
Instrument:

Alliance 2695 with 2996 PDA

Gradient

Time (min)	Profile	
	%A	%B
0.0	80	20
4.0	40	60

Results and Discussion



Featured Products

- [Alliance HPLC System <https://www.waters.com/534293>](https://www.waters.com/534293)

WA41900, March 2005



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