

An improved analysis of triazines using a Thermo Scientific Accucore XL C8 4 μm
HPLC column

Application #393

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General Information

Market: Pharma

Matrix: N/A

Instrument type: HPLC

Description

The Thermo Scientific UltiMate 3000 RSLC system is applied for the analysis of triazines. The separation is performed on a Thermo Scientific Accucore XL C8 4 μ m HPLC column, with UV detection at 220 nm.

Compared to a conventional 5 m fully porous column using the same experimental conditions, the Thermo Scientific Accucore XL C8 m HPLC column provides improved efficiency, sensitivity and resolution for the analysis of triazines.

Method Details

Instrument parameters

Instrument Parameter	Value
Run Time Length	15 min
Injection Volume	5 μ L
Column Oven 1 Temp	25 $^{\circ}$ C
UV Wavelength 1	240 nm
Pump Eluent A	Water
Pump Eluent B	Acetonitrile

Gradient Details

Pump

Ret.Time [min]	Flow [ml/min]	%B [%]	%C [%]	%D [%]
0.000	1.500	20.0	0.0	0.0
10.000	1.500	60.0	0.0	0.0
10.100	1.500	20.0	0.0	0.0
15.000	1.500	20.0	0.0	0.0

Column Details

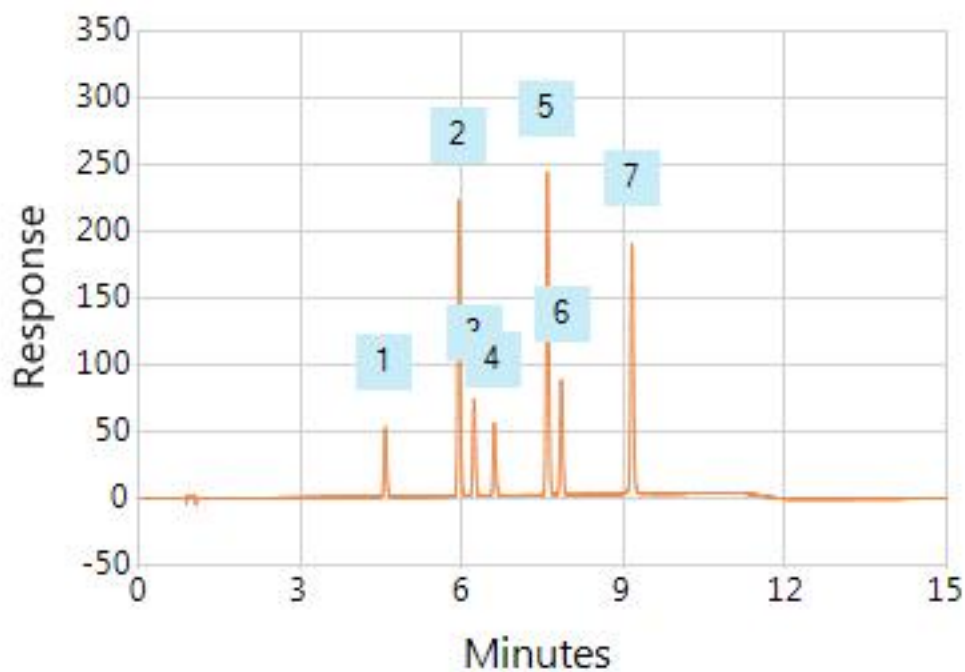
column_A	
Manufacturer	Thermo Scientific
Model	Accucore XL C8
Diameter	4.6 mm
Length	150 mm
Particle Size	4 μ m
Packing Material	C8
Part Number	74204-154630
Url	http://www.thermoscientific.com/en/products/accucore-xl-c8-4-m-hplc-columns.html

System information

Instrument Type	HPLC
Detector 1 Model	DAD-3000RS
System	UltiMate 3000 RSLC
Manufacturer	Thermo Scientific
Autosampler model	WPS-3000
Oven model	TCC-3200
Detector 1 Type	UV

Results

Channel UV_VIS_1



Component Number	Component Name	Compound Class	Retention Time (min)
1	Simazine	Triazine	4.58
2	Simetryn	Triazine	5.95
3	Atrazine	Triazine	6.23
4	Prometon	Triazine	6.60
5	Ametryn	Triazine	7.59
6	Propazine	Triazine	7.85
7	Prometryn	Triazine	9.16

Appendix

The application can be accessed at <http://appslab.thermoscientific.com/ViewApplication?ApplicationId=393>

Available Downloads

Filename	Size(bytes)
Triazines.pdf	475900

Related Information

Title	Link
UltiMate 3000 RSLC system product page	http://www.thermoscientific.com/en/products/rapid-separation-rs-systems.html