

Analysis of Endocrine Disruptors using a Core Enhanced Technology 4 μm
Accucore XL C8 HPLC Column

Application #399

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Analysis of Endocrine Disruptors using a Core Enhanced Technology 4 μ m Accucore XL C8 HPLC Column

General Information

Market: Pharmaceutical

Matrix: Standard

Instrument type: HPLC

Description

Based on Core Enhanced Technology™ using 4 μ m solid core particles, Accucore™ XL HPLC columns allow users of conventional HPLC methods to enjoy performances far beyond that of columns packed with 5 μ m or even 3 μ m fully porous particles. Very high separation efficiencies using standard HPLC instruments and conditions provide increased peak resolution and lower limits of detection. An ultra-stable packed bed, results in exceptionally robust columns that demonstrate excellent retentions and response reproducibility.

Method Details

Instrument parameters

Instrument Parameter	Value
Run Time Length	20.000 min
Injection volume	5.0 µL
Tray temperature	24.5 °C
Oven Temperature	24.9 °C
Wavelength 1	220.0 nm
Mobile_Phase_A	Water
Mobile_Phase_B	Acetonitrile
Flow_Rate	1.5 mL/min
Column_Temperature	25 °C
Detection	uv 220 nm

Gradient Details

Ret. Time [min]	Flow [ml/min]	%B [%]	%C [%]
0.000	1.500	25.0	0.0
20.000	1.500	70.0	0.0

Ret. Time [min]	Flow [ml/min]	%B [%]	%C [%]
0.000	0.000	0.0	0.0
20.000	0.000	0.0	0.0

Column Details

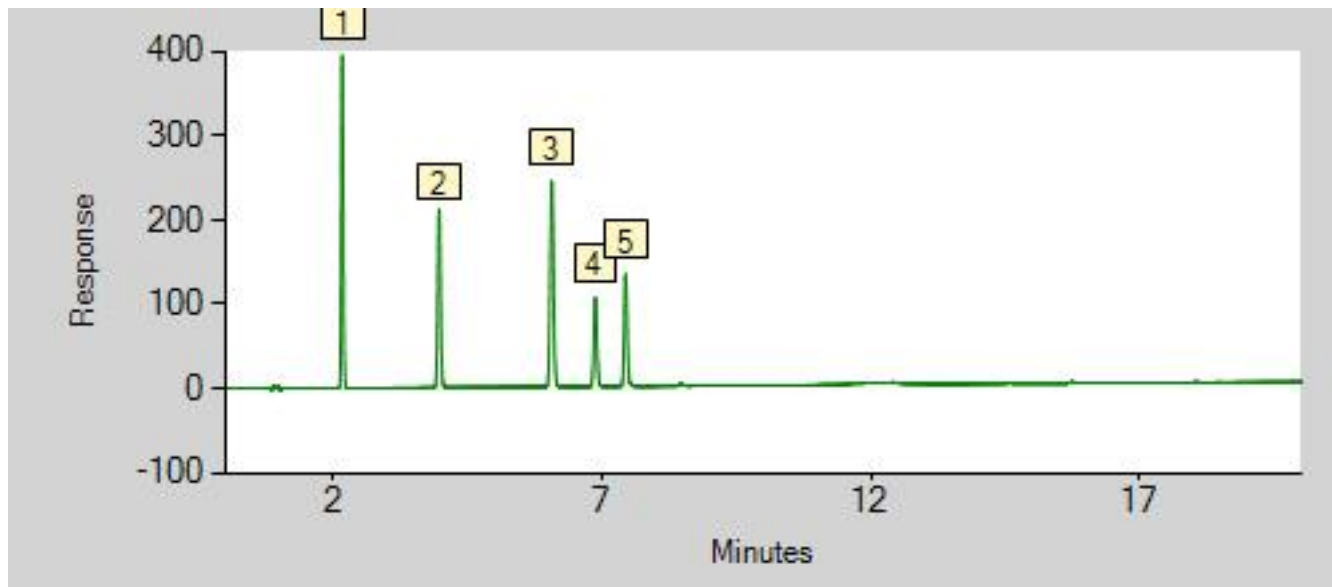
column_A	
Manufacturer	Thermo Fisher Scientific
Model	Accucore XL C8
Diameter	4.6
Length	150
Particle Size	4
Packing Material	C8

System information

Instrument Type	UHPLC
UV Detector model	DAD-3000RS
Autosampler model	WPS-3000
Oven model	TCC-3200

Results

Channel UV_VIS_1



No	Peak_Name	*Compound _Class	Retention_Ti me	Peak_Area	Peak_Area_p c	Peak_Height	Peak_Height _pc	Plates_(USP)	Resolution_(USP)	Tailing_Facto r_(USP)
1	Desethyl Atrazine	Herbicide Atrazine	2.185	15.963	25.95	389.664	36.04	17797	22.28	1.12
2	Simazine	Herbicide/ Triazine	3.983	12.735	20.70	210.837	19.50	27560	20.06	1.06
3	Atrazine	Atrazine	6.076	17.309	28.14	243.666	22.54	46579	7.48	1.07
4	Diuron	Herbicide	6.885	6.762	10.99	104.026	9.62	70474	5.45	1.10
5	Bisphenol	Bisphenol	7.446	8.738	14.21	133.028	12.30	84823	n.a.	1.16

Appendix

The application can be accessed at <http://dlibrary.dionex.com/Public/View.aspx?ApplicationID=399>

Available Downloads

Filename	Size(bytes)
AN20538_Endocrine_Disruptors.pdf	435424

Related Information

No related information available.