Analysis of Sulphonamides Using a Core Enhanced Technology Accucore HPLC Column

Application #612

25 February 2013

Analysis of Sulphonamides Using a Core Enhanced Technology Accucore HPLC Column

General Information

Market: Pharmaceutical
Matrix: N/A
Instrument type: HPLC

Description

This application note will demonstrate the use of the Thermo Scientific Accucore C18 HPLC column by the separation of five sulphonamides in less than 2 minutes and compare the similarity of the peak capacity achieved to that obtained with a Thermo Scientific Hypersil GOLD 1.9 m.

Method Details

Instrument parameters

Instrument Parameter	Value
Run Time Length	6.300 min
Column_temperature	45C
Injection_volume	1µL
Flow_rate	0.6 mL/min
UV_detection	260nm
Mobile_phase_A:	0.1% formic acid in water
Mobile_phase_B:	0.1% formic acid in acetonitrile

Gradient Details

Ret. Time [min]	Flow [ml/min]	%B [%]	%C [%]	%D [%]
0.000	0.600	5.0	0.0	0.0
2.300	0.600	60.0	0.0	0.0

Column Details

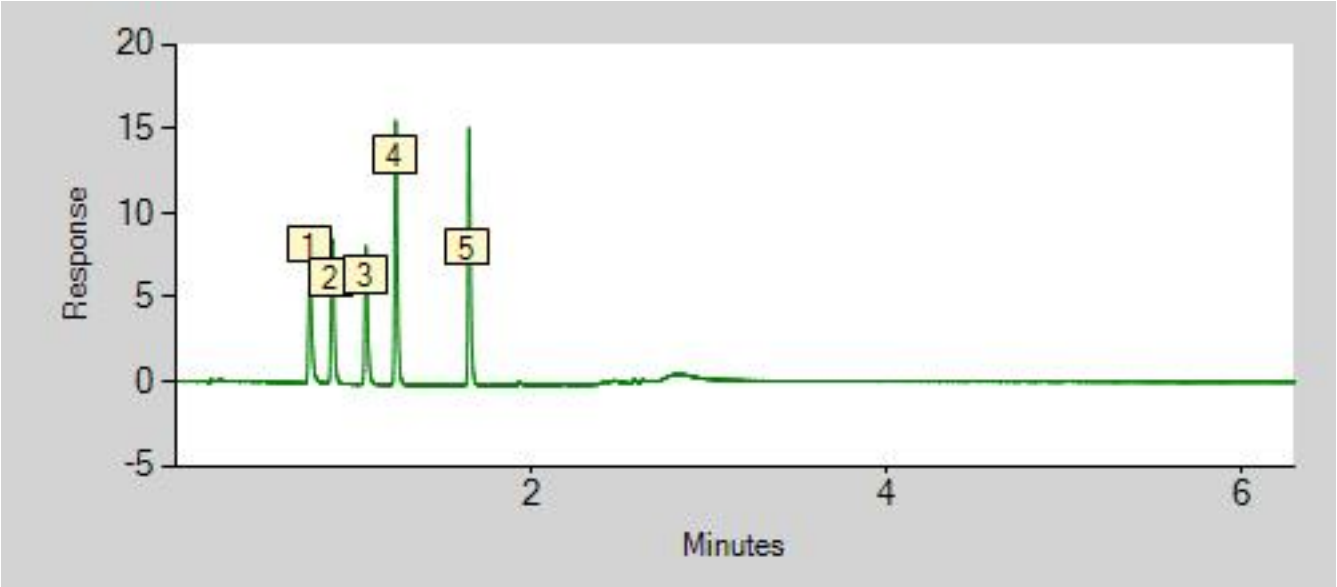
column_A	
Manufacturer	Thermo Scientific
Model	Accucore C18
Diameter	2.1
Length	50
Particle Size	2.6
Packing Material	Accucore C18 2.6 m 50 x 2.1mm PN 17126-052130

System information

Instrument Type	UHPLC

Results

Channel Channel_A



No	Peak_Name	*Compound_Class	Retention_Time	Peak_Area	Peak_Area_pc	Peak_Height	Peak_Height_pc	Plates_(USP)	Resolution_(USP)	Tailing_Factor_(USP)
1	sulfamethizole	n.a.	0.756	0.141	14.54	6.258	11.64	7812	3.99	1.56
2	sulfamonemethoxide	n.a.	0.883	0.162	16.65	8.470	15.76	14203	6.46	1.25
3	sulfaquinoxaline	n.a.	1.072	0.152	15.66	8.145	15.15	22396	6.11	1.44
4	sulfamerazine	n.a.	1.239	0.270	27.81	15.633	29.09	35797	16.40	1.47
5	sulfathiazole	n.a.	1.652	0.246	25.34	15.241	28.36	75059	n.a.	1.57

Appendix

The application can be accessed at http://dlibrary.dionex.com/Public/View.aspx?ApplicationID=612

Available Downloads

Filename	Size(bytes)
ANCCSCETSULPH_0611.pdf	1326630

Related Information

No related information available.