

Sapphirus ODS & BDS HPLC Columns

Weak Bases & Acid

Weak Bases & Chelate

Strong Bases

ODS

Mechanisms of Separation

Hydrophobic	Moderate
Hydrophilic	Low
Acidic	Strong
Basic	Weak
Ion Exchange	-
π - π	-

Target Analytes

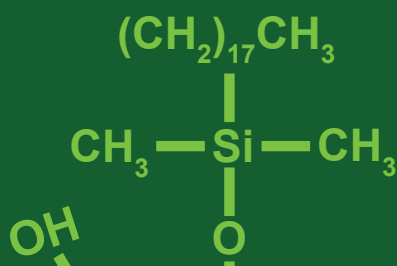
Nonpolar, moderately polar analytes
Neutrals and Lipophilic compounds

Applications

Mixtures of very polar & polar analytes
Triglycerides
Phenol and Chlorophenols
Polarity mixture

Specifications

Pore size (Å)	145
Particle Size (µm)	3, 5
Surface Area (m ² /g)	185
Carbon Load %	10
End-Capping	Yes
pH Range	2 to 8
Aq. Compatible	95%
USP Listing	L1
Phase Type	Monomeric



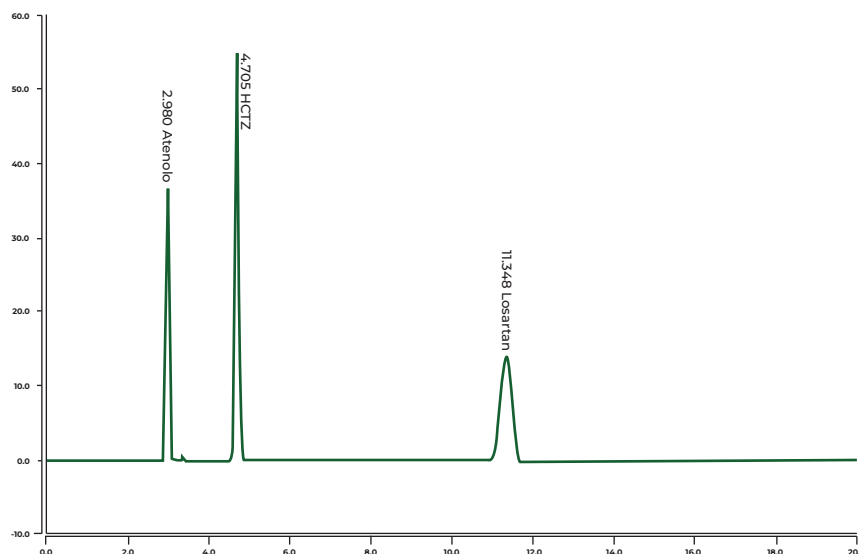
Atenolol, Hydrochlorothiazide and Losartan in Pharmaceutical dosage

Conditions

Column: Sapphirus ODS
250X4.6 mm, 5 µm
Part Number: 8182101
Mobile Phase: 6.3 gm of ammonium formate in 1 Lit HPLC water.
Mix buffer and acetonitrile 70:30 v/v.
Flow Rate: 1.0 ml/min
Temperature: 30°C
Detection: UV, 280 nm
Injection Volume: 10µl
Sample: 50 ppm of Atenolol, 50 ppm of Losartan and 12.5 ppm of Hydrochlorothiazide in mobile phase.

Compounds

1. Atenolol
2. Hydrochlorothiazide
3. Losartan



Sapphirus® ODS Analytical Columns

Particle Size	Packing	I.D. X Length	Part No.
5µm	ODS	250 x 4.6 mm	8182101
	ODS	150 x 4.6 mm	8182103
	ODS	100 x 4.6 mm	8182105
	ODS	250 x 4.0 mm	8182109
	ODS	150 x 4.0 mm	8182111
	ODS	100 X 4.0 mm	8182113
	ODS	250 x 3.0 mm	8182125
	ODS	150 x 3.0 mm	8182127
	ODS	100 x 3.0 mm	8182129
3µm	ODS	250 x 4.6 mm	8182139
	ODS	150 x 4.6 mm	8182141
	ODS	100 x 4.6 mm	8182143
	ODS	250 x 4.0 mm	8182146
	ODS	150 x 4.0 mm	8182148
	ODS	100 X 4.0 mm	8182150
	ODS	50 x 4.0 mm	8182152
	ODS	250 x 3.0 mm	8182160

Other particle sizes and dimensions are available.

C18 BDS

Mechanisms of Separation

Hydrophobic	Strong
Hydrophilic	Low
Acidic	Moderate
Basic	Moderate
Ion Exchange	-
π - π	-

Target Analytes

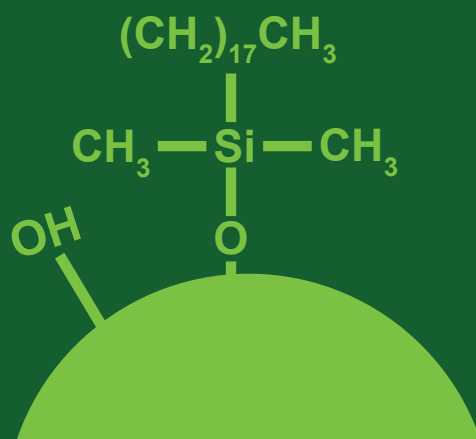
Deactivated -OH groups
Reduce the peak tailing For Basic Compounds
Base deactivated with minimal residual silanol activity
Acids, Bases, and Neutrals

Applications

Weak Bases & Acid
Weak Bases & Chelate
Strong Bases
Pesticides and Herbicides
Caffeine & Phenol

Specifications

Pore size (Å)	145
Particle Size (µm)	3, 4, 5
Surface Area (m ² /g)	185
Carbon Load %	11
End-Capping	Yes
pH Range	2 to 8
Aq. Compatible	95%
USP Listing	L1
Phase Type	Monomeric



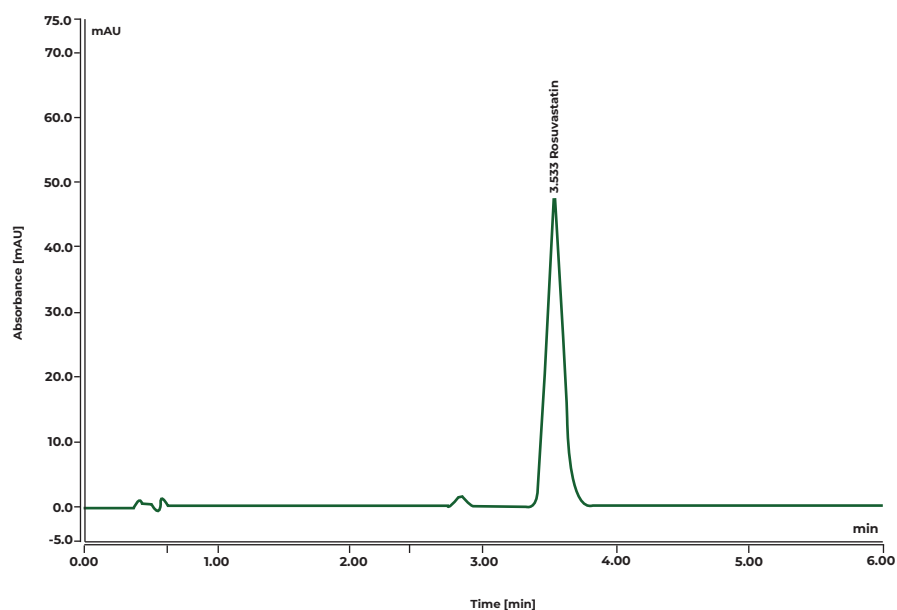
Rosuvastatin Assay and Dissolution

Conditions

Column:	Sapphirus® BDS C18 50x4.6 mm, 5µm
Part Number:	8182181
Mobile Phase:	Acetonitrile, water, and phosphoric acid (400 : 600 : 1)
Flow Rate:	1.0 ml/min
Temperature:	25°C
Detection:	UV, 242 nm
Injection Volume:	10µl
Sample:	0.1 mg/ml of Rosuvastatin in diluent

Compounds

1. Rosuvastatin



Sapphirus® C18 BDS Analytical Columns

Particle Size	Packing	I.D. X Length	Part No.
5µm	C18 BDS	250 x 4.6 mm	8182175
	C18 BDS	150 x 4.6 mm	8182177
	C18 BDS	100 x 4.6 mm	8182179
	C18 BDS	50 X 4.6 mm	8182181
	C18 BDS	250 x 4.0 mm	8182190
	C18 BDS	150 x 4.0 mm	8182192
	C18 BDS	100 X 4.0 mm	8182194
	C18 BDS	50 x 4.0 mm	8182196
	3µm	C18 BDS	250 x 4.6 mm
C18 BDS		150 x 4.6 mm	8182184
C18 BDS		100 x 4.6 mm	8182186
C18 BDS		50 X 4.6 mm	8182188
C18 BDS		250 x 4.0 mm	8182197
C18 BDS		150 x 4.0 mm	8182199
C18 BDS		100 X 4.0 mm	8182201
C18 BDS		50 x 4.0 mm	8182203

Other particle sizes and dimensions are available.

C8 BDS

Mechanisms of Separation

Hydrophobic	Strong
Hydrophilic	Low
Acidic	Moderate
Basic	Moderate
Ion Exchange	-
π - π	-

Target Analytes

Deactivated -OH groups
Reduce the peak tailing
Base deactivated with minimal residual silanol activity
Acids, Bases, and Neutrals

Applications

Weak Bases & Acid
Weak Bases & Chelate
Strong Bases
Pesticides and Herbicides
Caffeine & Phenol

Specifications

Pore size (Å)	145
Particle Size (µm)	3, 4, 5
Surface Area (m ² /g)	185
Carbon Load %	7
End-Capping	Yes
pH Range	2 to 8
Aq. Compatible	95%
USP Listing	L8
Phase Type	Monomeric

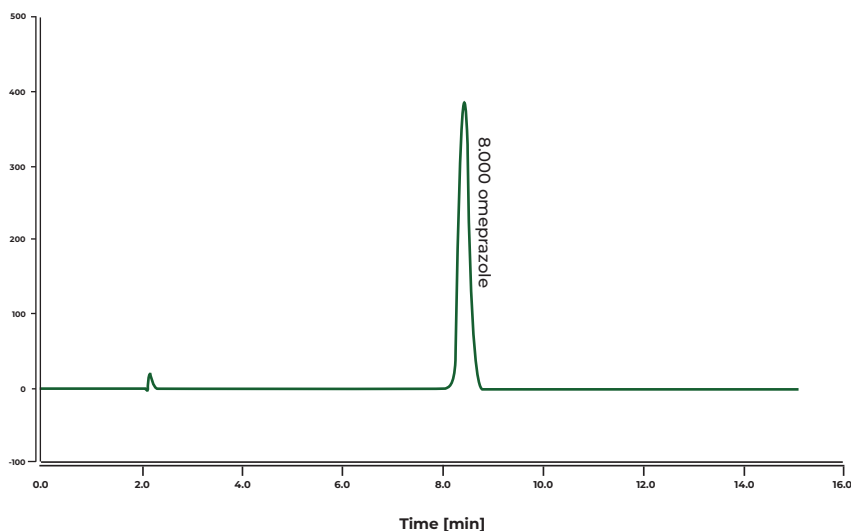
Omeprazole

Conditions

Column: Sapphirus® BDS C8
150x4.6 mm, 5µm
Part Number: 8182251
Mobile Phase: Mix Phosphate Buffer pH 7.8 and
Acetonitrile 75:25 v/v
Flow Rate: 0.8 ml/min
Temperature: 30°C
Detection: UV, 280 nm
Injection Volume: 20µl

Compounds

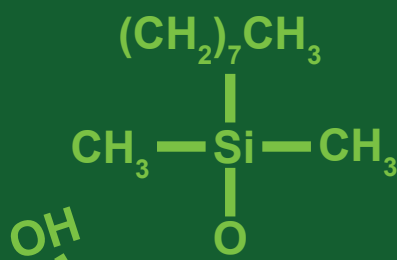
1. Omeprazole



Sapphirus C8 BDS Analytical Columns

Packing	Format	I.D. X Length	Part No.
5µm	C8 BDS	250 x 4.6 mm	8182249
	C8 BDS	150 x 4.6 mm	8182251
	C8 BDS	100 x 4.6 mm	8182253
	C8 BDS	250 x 4.0 mm	8182264
	C8 BDS	150 x 4.0 mm	8182266
	C8 BDS	100 X 4.0 mm	8182268
3µm	C8 BDS	250 x 4.6 mm	8182256
	C8 BDS	150 x 4.6 mm	8182258
	C8 BDS	100 x 4.6 mm	8182260
	C8 BDS	250 x 4.0 mm	8182271
	C8 BDS	150 x 4.0 mm	8182273
	C8 BDS	100 X 4.0 mm	8182275

Other particle sizes and dimensions are available.



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