

eXtra Densely Bonded and Double Endcapped Eclipse XDB Bonded Phase

## ZORBAX Eclipse XDB

- Four selectivity choices for method development optimization
- Good peak shape for basic, acidic and neutral compounds
- High performance over a wide pH range – pH 2-9
- Particle sizes from 1.8 to 7  $\mu\text{m}$
- Long lifetime with eXtra Dense Bonding and double endcapping

Agilent ZORBAX Eclipse XDB columns – C18, C8, Phenyl and CN – provide four bonded phase choices for method development optimization. These columns provide good peak shape over a wide pH range (2-9) for additional method development flexibility with one family of columns. Eclipse XDB columns can be used for method development at low pH (2-3) and the same column can be used for method development in the mid pH (6-8) region. In the mid pH region residual silanols are more active and tailing interactions are more likely. To overcome these interactions, Eclipse XDB columns are eXtra Densely Bonded and double endcapped through a proprietary process to cover as many active silanols as possible. The result is superior peak shape of basic compounds from pH 2-9. Eclipse XDB columns are available in 1.8, 3.5, 5 and 7  $\mu\text{m}$  particle sizes for high speed, high resolution, analytical and prep scale separations.

### Column Specifications

Bonded Phase	Pore Size	Surface Area	Temp. Limits	pH Range*	Endcapped	Carbon Load
ZORBAX Eclipse XDB-C18	80Å	180 m <sup>2</sup> /g	60 °C	2.0-9.0	Double	10%
ZORBAX Eclipse XDB-C8	80Å	180 m <sup>2</sup> /g	60 °C	2.0-9.0	Double	7.6%
ZORBAX Eclipse XDB-Phenyl	80Å	180 m <sup>2</sup> /g	60 °C	2.0-9.0	Double	7.2%
ZORBAX Eclipse XDB-CN	80Å	180 m <sup>2</sup> /g	60 °C	2.0-8.0	Double	4.3%

Specifications represent typical values only



\*Eclipse XDB columns are designed for operation over a wide pH range. At pH 6-9, highest columns stability for all silica based columns is achieved by operating at temperatures <40 °C and using low buffer concentrations in the range of 0.01-0.02 M.



### TIPS & TOOLS

Poroshell 120 EC-CN is very similar to ZORBAX XDB-CN. Page 228

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Hardware Description	Size (mm)	Particle Size (µm)	Eclipse XDB-C18 USP L1	Eclipse XDB-C8 USP L7	Eclipse XDB-Phenyl USP L11	Eclipse XDB-CN USP L10
<b>Standard Columns (no special hardware required)</b>						
Semi-Preparative	9.4 x 250	5	990967-202	990967-206		
Analytical	4.6 x 250	5	990967-902	990967-906	990967-912	990967-905
Analytical	4.6 x 150	5	993967-902	993967-906	993967-912	993967-905
Analytical	4.6 x 50	5	946975-902	946975-906		
Rapid Resolution	4.6 x 150	3.5	963967-902	963967-906	963967-912	963967-905
Rapid Resolution	4.6 x 100	3.5	961967-902	961967-906		961967-905
Rapid Resolution	4.6 x 75	3.5	966967-902	966967-906	966967-912	966967-905
Rapid Resolution	4.6 x 50	3.5	935967-902	935967-906	935967-912	
Rapid Resolution	4.6 x 30	3.5	934967-902	934967-906		
Rapid Resolution	4.6 x 20	3.5	932967-902	932967-906		
 UHPLC Guard, 1200 bar, 3/pk	4.6 x 5	1.8	820750-903			
Rapid Resolution HT, 600 bar	4.6 x 100	1.8	928975-902	928975-906		
Rapid Resolution HT, 600 bar	4.6 x 50	1.8	927975-902	927975-906		
Rapid Resolution HT, 600 bar	4.6 x 30	1.8	924975-902	924975-906		
Rapid Resolution HT, 600 bar	4.6 x 20	1.8	926975-902	926975-906		
Solvent Saver	3.0 x 250	5	990967-302	990967-306	990967-312	990967-305
Solvent Saver	3.0 x 150	5	993967-302	993967-306	993967-312	993967-305
Solvent Saver Plus	3.0 x 150	3.5	963954-302	963954-306	963954-312	963954-305
Solvent Saver Plus	3.0 x 100	3.5	961967-302	961967-306	961967-312	
Solvent Saver Plus	3.0 x 75	3.5	966954-302			
Solvent Saver RRHD, 1200 bar	3.0 x 150	1.8	981759-302			
Solvent Saver RRHD, 1200 bar	3.0 x 100	1.8	981758-302			
Solvent Saver RRHD, 1200 bar	3.0 x 50	1.8	981757-302			
Solvent Saver HT, 600 bar	3.0 x 100	1.8	928975-302	928975-306		
Solvent Saver HT, 600 bar	3.0 x 50	1.8	927975-302	927975-306		
Solvent Saver HT, 600 bar	3.0 x 30	1.8	924975-302	924975-306		
Solvent Saver HT, 600 bar	3.0 x 20	1.8	926975-302	926975-306		
 UHPLC Guard, 1200 bar, 3/pk	3.0 x 5	1.8	823750-903			
Narrow Bore	2.1 x 150	5	993700-902	993700-906	993700-912	993700-905
Narrow Bore	2.1 x 50	5	960967-902	960967-906	960967-912	960967-905
Narrow Bore RR	2.1 x 150	3.5	930990-902	930990-906		

Unless indicated, column pressure limit is 400 bar.

\*These columns are packed with Eclipse XDB-C18, 5 µm.

(Continued)

## ZORBAX Eclipse XDB

Hardware Description	Size (mm)	Particle Size (µm)	Eclipse XDB-C18 USP L1	Eclipse XDB-C8 USP L7	Eclipse XDB-Phenyl USP L11	Eclipse XDB-CN USP L10
<b>Standard Columns (no special hardware required)</b>						
Narrow Bore RR	2.1 x 100	3.5	961753-902	961753-906		961753-905
Narrow Bore RR	2.1 x 75	3.5	966735-902			
Narrow Bore RR	2.1 x 50	3.5	971700-902	971700-906		
Narrow Bore RR	2.1 x 30	3.5	974700-902	974700-906		
Narrow Bore RR	2.1 x 20	3.5	972700-902	972700-906		
Narrow Bore RRHD, 1200 bar	2.1 x 150	1.8	981759-902			
Narrow Bore RRHD, 1200 bar	2.1 x 100	1.8	981758-902			
Narrow Bore RRHD, 1200 bar	2.1 x 50	1.8	981757-902			
Narrow Bore RRHT, 600 bar	2.1 x 100	1.8	928700-902	928700-906		
Narrow Bore RRHT, 600 bar	2.1 x 50	1.8	927700-902	927700-906		
Narrow Bore RRHT, 600 bar	2.1 x 30	1.8	924700-902	924700-906		
Narrow Bore RRHT, 600 bar	2.1 x 20	1.8	926700-902	926700-906		
 UHPLC Guard, 1200 bar, 3/pk	2.1 x 5	1.8	821725-903			
MicroBore RR	1.0 x 150	3.5	963600-902	963600-906		
MicroBore RR	1.0 x 50	3.5	965600-902	965600-906		
MicroBore RR	1.0 x 30	3.5	961600-902	961600-906		
MicroBore Guard, 3/pk	1.0 x 17	5	5185-5921	5185-5921		
 Guard Cartridge	9.4 x 15	5	820675-112*	820675-112*	820675-112*	820675-112*
 Guard Cartridges, 4/pk	4.6 x 12.5	5	820950-925	820950-926	820950-927	820950-935
 Guard Cartridges, 4/pk	2.1 x 12.5	5	821125-926	821125-926	821125-926	821125-935
 Guard Hardware Kit			840140-901	840140-901	840140-901	840140-901
 Guard Hardware Kit			820999-901	820999-901	820999-901	820999-901
<b>PrepHT Cartridge Columns (require endfittings kit 820400-901)</b>						
 PrepHT Cartridge	21.2 x 250	7	977250-102	977250-106		
 PrepHT Cartridge	21.2 x 150	7	977150-102	977150-106		
 PrepHT Cartridge	21.2 x 150	5	970150-902	970150-906		
 PrepHT Cartridge	21.2 x 100	5	970100-902	970100-906		
 PrepHT Cartridge	21.2 x 50	5	970050-902	970050-906		
 PrepHT Guard Cartridge	17.0 x 7.5	5	820212-925	820212-926		
 Guard Cartridge Hardware			820444-901	820444-901		
 PrepHT Endfittings, 2/pk			820400-901	820400-901		

Unless indicated, column pressure limit is 400 bar.

\*These columns are packed with Eclipse XDB-C18, 5 µm.