

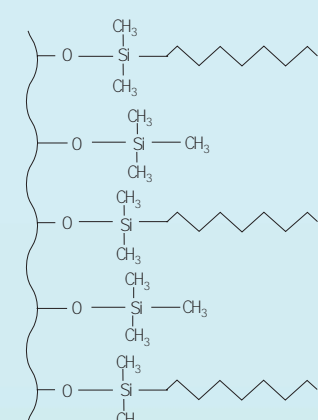
Agilent HPLC Columns Navigator

Small Molecule Applications

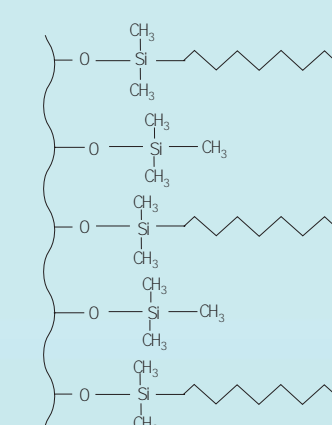


Poroshell 120: Chromatographers need to get the most from every instrument in their lab – more speed, more resolution. Poroshell 120 offers the advantage of high speed and high resolution with proprietary superficially porous particle technology for small molecule and peptide mapping applications. Six new phases to be introduced in 2012!

ZORBAX Eclipse Plus: Improved silica and bonding helps chromatographers see better peak shapes for more accurate and sensitive results. Eclipse Plus features a special bonding treatment and optimized endcapping that makes it the first choice for method development.



ZORBAX Eclipse XDB: Agilent's unique endcapping process helps improve peak shapes across a wide pH range. Eclipse XDB was the first ZORBAX family with eXtra Dense Bonding and double endcapping on highly pure silica. Because we make the silica, we have control with testing how we can make it better.



Looking for a HILIC column?

HILIC Plus is a HILIC column based on Eclipse Plus silica for excellent peak shapes

Non-bonded silica

Pore size: 95Å
Surface Area: 160 m²/g
Particle Sizes: 1.8, 3.5 μm
pH: 0-8.0

High sensitivity for LC/MS applications and recommended for EPA 1694.

RRHD: 1.8 μm, stable to 1200 bar
Lengths: 50, 100, 150 mm
IDs: 4.6 mm (3.5 μm only), 3.0 mm, 2.1 mm

The Measure of Confidence

START HERE
for time savings and improved resolution on any HPLC

Poroshell 120

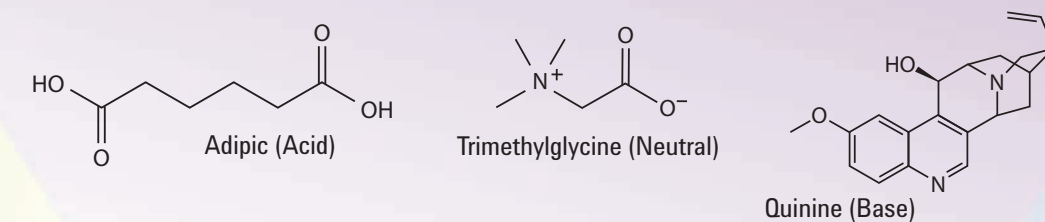
1.7 μm solid core with 0.5 μm porous outer layer for a 2.7 μm particle
IDs: 4.6 mm, 3.0 mm, 2.1 mm
Lengths: 30-150 mm

New phases and configurations coming soon!
Check www.agilent.com/chem/poroshell120 for more information.

**Up to 50% less pressure than sub-2 μm;
a total lab productivity enhancer**

EC-C18 (USP L1), EC-C8 (USP L1), SB-C18 (USP L1), SB-C8*[†], Phenyl-Hexyl (USP L11), SB-Aq, Bonus-RP (USP L60)*

Compatible with HPLC and UHPLC instruments suitable for analysis of acids, bases, and neutrals. Also great for peptide mapping. Poroshell 120 is for any lab looking for increased analytical speed and resolution without increased back pressure.



Endcapped: EC-C18, EC-C8, Phenyl-Hexyl, Bonus-RP (triple)
Non-endcapped: SB-C18, SB-C8 and SB-Aq

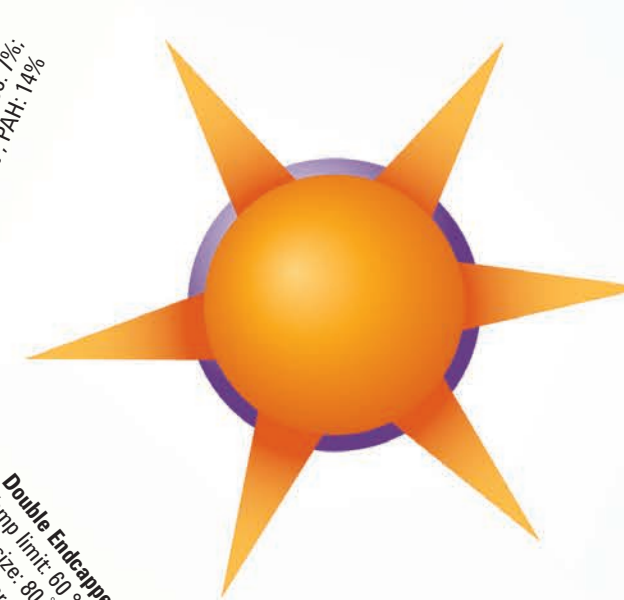
Temp Limit: 60 °C (EC-C18, EC-C8, Phenyl-Hexyl, Bonus-RP); 80 °C (SB-C8, SB-Aq); 90 °C (SB-C18)
Pore Size: 120Å

Surface Area: 130 m²/mg

pH: 2.0-8.0 (EC-C18, EC-C8, Phenyl-Hexyl); 1.0-8.0 (SB-C18, SB-C8, SB-Aq); 2.0-9.0 (Bonus-RP)

Carbon Load: 8% (EC-C18); 7% (EC-C8); 75% (SB-C18); 45% (SB-C8); 8% (Phenyl-Hexyl); Proprietary (SB-Aq); 2.7% (Bonus-RP)

*available summer 2012



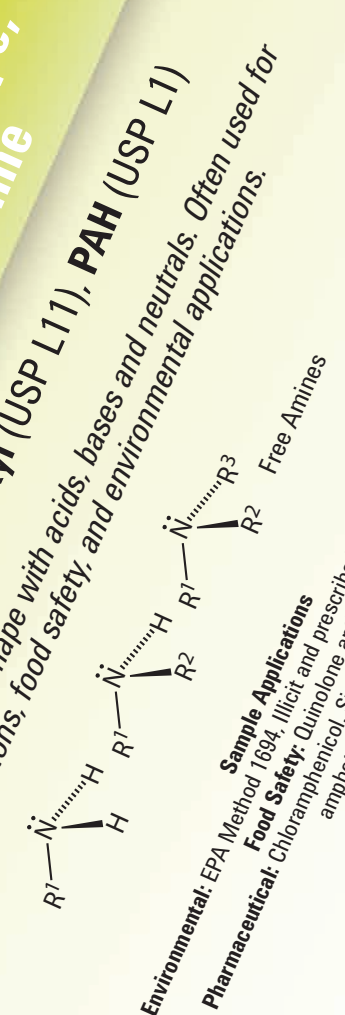
START HERE
for method development

ZORBAX Eclipse Plus

IDs: 4.6 mm, 3.0 mm, 2.1 mm; Prep
Lengths: 30-250 mm
RRHD: 1.8 μm, stable to 1200 bar

Best all around – exceptional peak shape, efficiency, resolution, and lifetime

C18 (USP L1), C8 (USP L7), Phenyl-Hexyl (USP L11), PAH (USP L1)
High performance and excellent peak shape with acids, bases and neutrals. Often used for pharmaceutical applications, food safety, and environmental applications.



Double Endcapped
Temp Limit: 60 °C
Surface Area: 130 m²/mg
pH: 1.0-8.0 for C18, C8, Phenyl-Hexyl; 2.0-9.0 for PAH

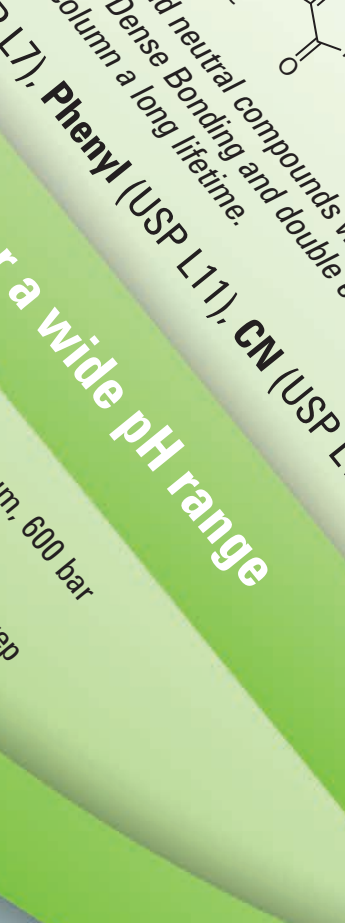
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for low pH mobile phases

ZORBAX Eclipse XDB

IDs: 4.6 mm, 3.0 mm, 2.1 mm, 1.0 mm; Capillary and Prep
Lengths: 15-250 mm
RRHD: 1.8 μm, stable to 1200 bar

High performance over a wide pH range

C18 (USP L1), C8 (USP L7), Phenyl (USP L11), CN (USP L10)
Good peak shape for basic, acidic, and neutral compounds with high performance over a wide pH range (pH 2-9) extra Dense Bonding and double endcapping help give this column a long lifetime.



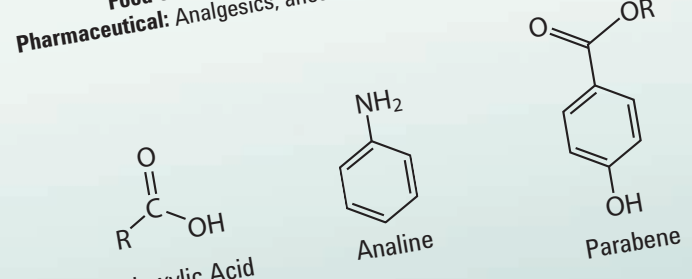
Double Endcapped
Temp Limit: 60 °C
Surface Area: 130 m²/mg
pH: 1.0-8.0 for C18, C8, Phenyl; 2.0-9.0 for CN

ZORBAX StableBond

RRHD: 1.8 μm, stable to 1200 bar; **RRHT:** 1.8 μm, 600 bar
Lengths: 20-250 mm
IDs: 4.6 mm, 3.0 mm, 2.1 mm, 1.0 mm; Prep, Capillary (C18)

Best for low pH mobile phases – great for method development

SB-C18 (USP L1), SB-C8 (USP L7), SB-C3 (USP L56) SB-Phenyl (USP L11), SB-CN (USP L10), SB-Aq
High performance with acids, bases, and neutrals with superior lifetime at low pH.



Non-Endcapped
Temp Limit: 30 °C (90 °C for SB-C18)
Pore size: 90Å
Surface area: 160 m²/g
Particle sizes: 1.8, 3.5, 5, 7 μm
pH: 1.0-8.0 (0.8-8.0 for SB-C18)
Carbon Load: C18: 10%; C8: 5.5%; C3: 4%; Phenyl: 5.5%; CN: 4%; Aq: Proprietary

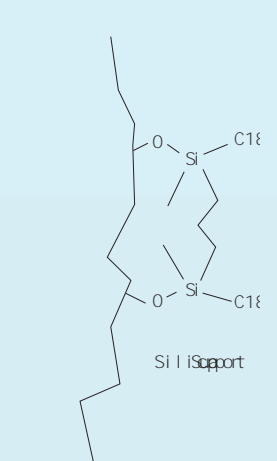
Triple Endcapped
Temp Limit: 60 °C
Surface Area: 130 m²/mg
pH: 1.0-8.0 for C18, C8, Phenyl; 2.0-9.0 for SB-C18

ZORBAX Extend-C18

RRHD: 1.8 μm, stable to 1200 bar
IDs: 4.6 mm, 3.0 mm, 2.1 mm, 1.0 mm; Prep
Lengths: 20-250 mm
RRHT: 1.8 μm, 600 bar

A good option for separations at high pH

C18 (USP L1)
High efficiency and long life at high pH – up to pH 11.5. Improve resolution and peak shape of basic compounds. High sensitivity for LC/MS separations of peptides. Unique bidentate bonding and double endcapping provides high pH stability.



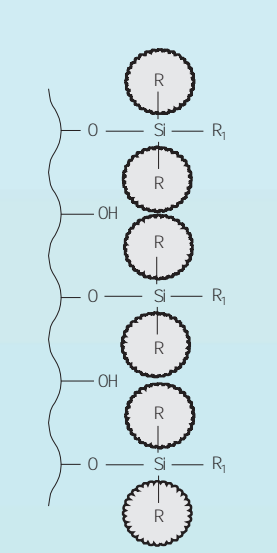
ZORBAX Extend-C18: Features a special Agilent bidentate for a C18 column that shields the silica and works well up to pH 11.

ZORBAX Bonus-RP

RRHD: 1.8 μm, stable to 1200 bar; **RRHT:** 1.8 μm, 600 bar
IDs: 4.6 mm, 3.0 mm, 2.1 mm, 1.0 mm; Prep
Lengths: 30-250 mm

Alternative selectivity to alkyl, phenyl, cyano phases

Bonus-RP (USP-L60)
Polar embedded to improve peak shapes for basic compounds at low and mid pH.



ZORBAX Bonus-RP: Developed as one of the tools for superior peak shape with basic compounds. The goal of these types of “polar embedded” bonded phases with amide linkages is to improve peak shape in high aqueous mobile phases. Agilent’s R&D team started with a StableBond strategy to improve lifetime, added the amide linkage and a unique triple endcapping process for enhanced stability of the amide linkage.

ZORBAX StableBond

RRHD: 1.8 μm, stable to 1200 bar; **RRHT:** 1.8 μm, 600 bar
IDs: 4.6 mm, 3.0 mm, 2.1 mm, 1.0 mm; Prep
Lengths: 30-250 mm

More options for Polar Compounds

C18-A (USP L1), C8-A (USP L7), C18-Ether (USP L1), C8-Ether (USP L7), Amide-C18 (USP L60), NH₂ (USP L8), Si-A (USP L3)
Hydrogen bond accepting and ether group endcapping provide alternate selectivities.