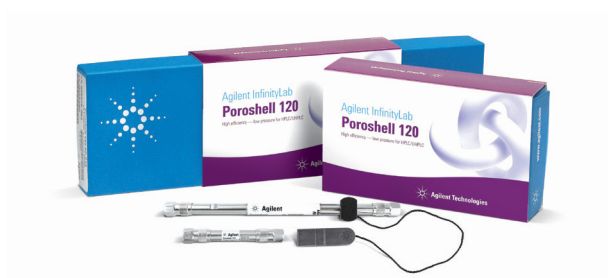
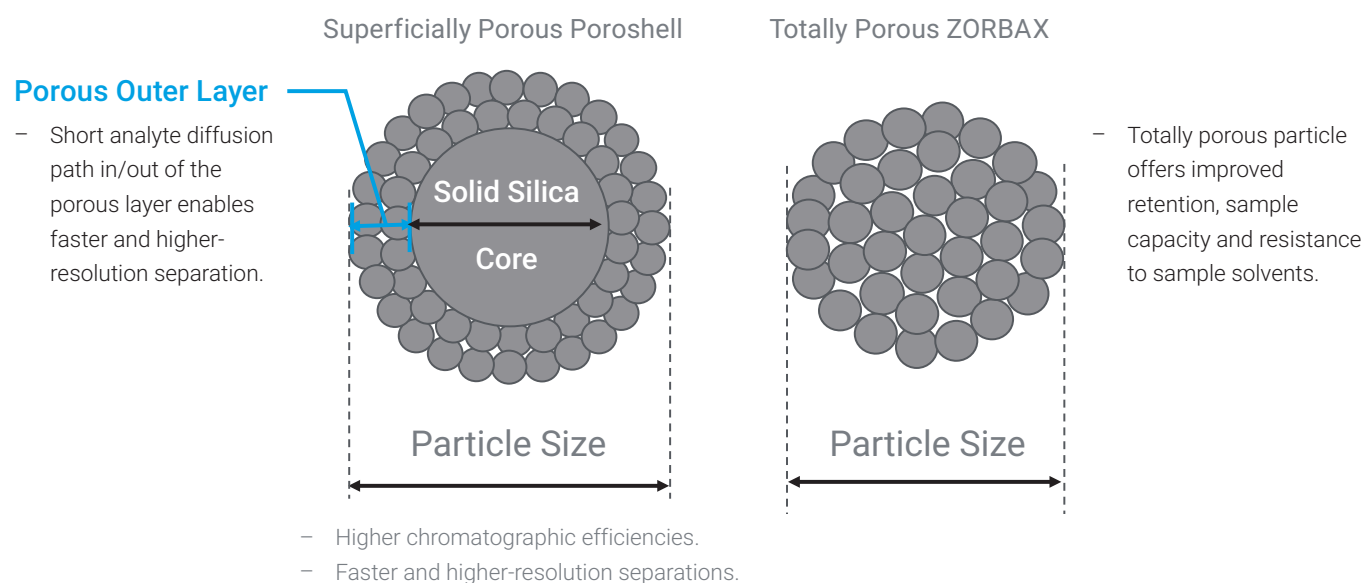
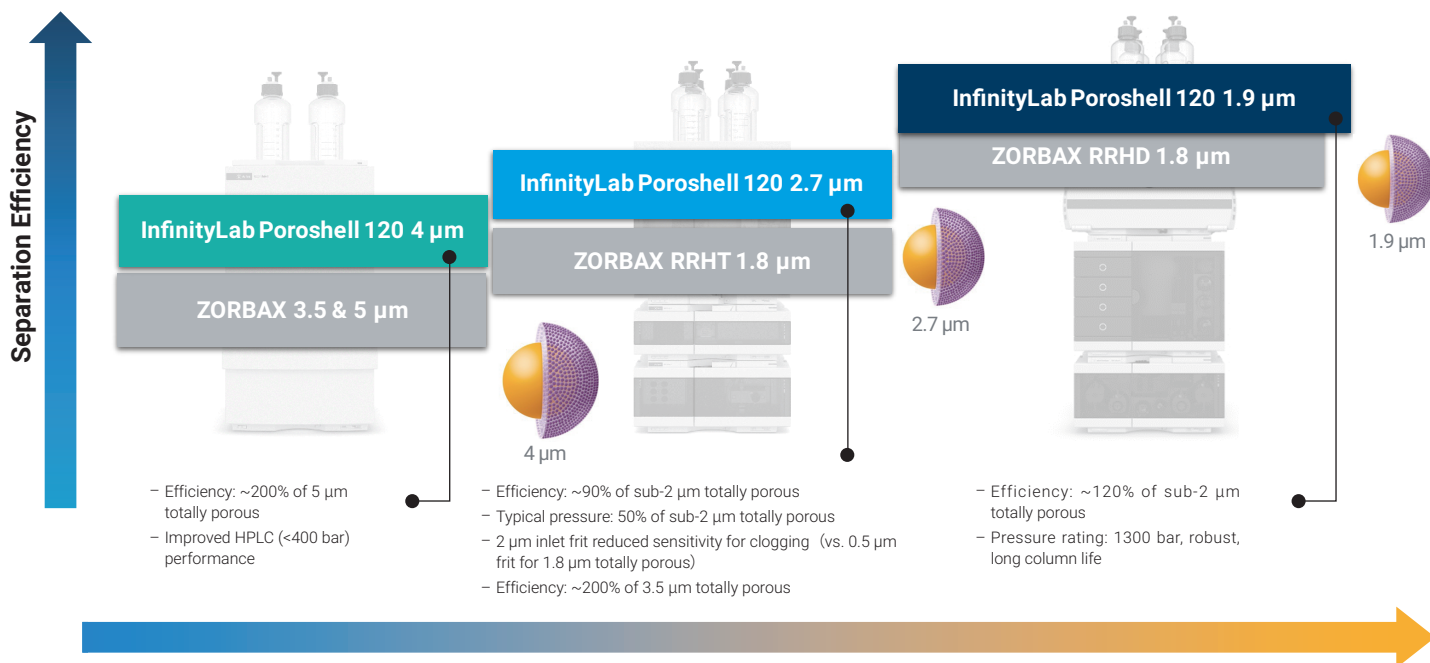


Agilent InfinityLab Poroshell 120 LC Columns: Novel Superficially Porous Columns

Comparison of Two Porous Particles

Novel Superficially Porous Particle vs. Traditional Totally Porous Particle





	HPLC	UHPLC	Low Dispersion UHPLC
Pressure	≤ 400 bar	400 - 800 bar	800 - 1300 bar
Resolution	Low	Low – Moderate	High
Loadability	High	High – Moderate	Moderate - Low
Column length	50 - 300 mm	30 - 150 mm	30 - 150 mm
Column I.D.	3.0 - 4.6 mm	2.1 - 4.6 mm	2.1 - 3.0 mm
Particle size	Poroshell: 4 µm ZORBAX: 3.5 µm, 5 µm	Poroshell: 2.7 µm ZORBAX: 1.8 µm	Poroshell: 1.9 µm ZORBAX: 1.8 µm

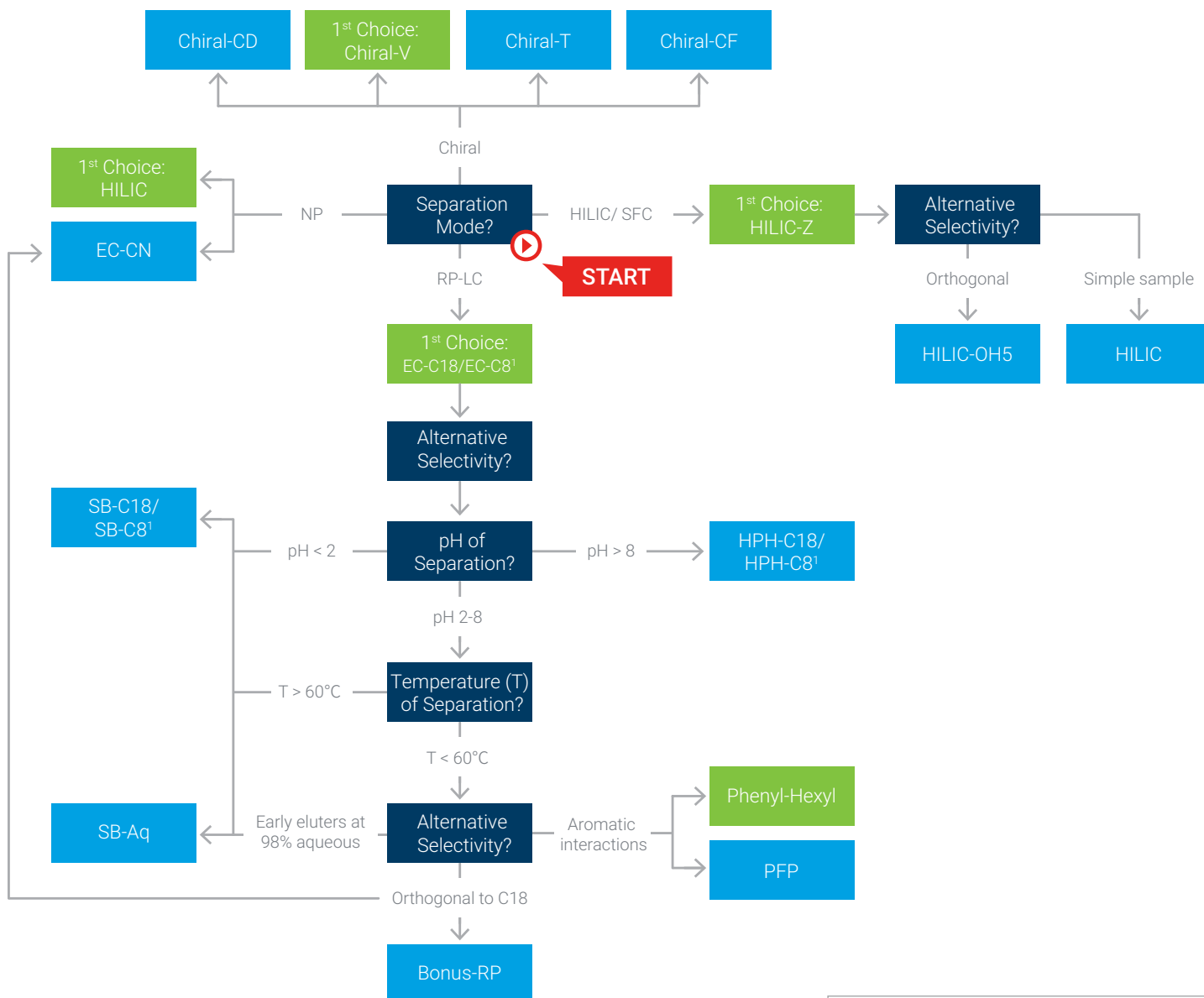
Agilent InfinityLab Poroshell 120 Columns Quick Recommendation

Agilent InfinityLab HPLC/UHPLC		Column Size (I.D. x Length, Particle size)	InfinityLab Poroshell 120 Chemistries						
			EC-C18	SB-C18	HPH-C18	Phenyl-Hexyl	SB-Aq	Bonus-RP	HILIC-Z
			1st Choice for Method Development Excellent peak shape and efficiency, also for basic compounds	Low pH (pH 1-8), excellent stability and peak shape in under highly acidic conditions	Excellent stability in at high pH, offers a wide pH range (pH 2-11)	Alternative selectivity with aromatic groups, different selectivity as C18/C8	Exceptional stability under high-aqueous conditions, including 100% water, 1 st choice for polar compounds	Unique selectivity to C18, embedded amide linker in the alkyl chain, stable at 100% water	Hydrophilic interaction column, excellent retention of highly polar or charged compounds
HPLC	– 1220 II	4.6 x 150 mm, 4 µm	693970-902T	683970-902T	693970-702T	693970-912T	683970-914	695968-901T (100 mm, 2.7µm)	683970-924
	– 1260 II VL (400bar)								
UHPLC	– 1260 II (600 bar)	4.6 x 100 mm, 2.7 µm	695975-902T	685975-902T	695975-702T	695975-912T	685975-914T	695968-901T	685975-924T
	– 1260 II Prime	3.0 x 100 mm, 2.7 µm	695975-302T	685975-302T	695975-502T	695975-312T	685975-314T	695968-301T	685975-324T
	– 1260 II LCMS	2.1 x 100 mm, 2.7 µm	695775-902T	685775-902T	695775-702T	695775-912T	685775-914T	695768-901T	685775-924T
	– 1260 II Prime LCMS								
Low dispersion UHPLC	– 1290 II	2.1 x 100 mm, 1.9 µm	695675-902	685675-902	695675-702	695675-912	685675-914	695768-901 (2.7 µm)	685675-924
	– 1290 II LCMS								

Note: 1) All of the recommended columns here are with ID tag. Except for 1220 InfinityLab II, all of the new instruments can be equipped with column ID Tag Readers to monitor tagged column usage status for ease of use, traceability and safety. **Currently, only InfinityLab Poroshell 120 columns come pre-tagged.** To order columns with a column ID tag, purchase part number with "T" at the end. If a PN is not available with "T", the standard PN is tagged by default, e.g. all Poroshell 120 1.9 µm and selected 4 µm columns. Column with ID Tag can be operated on any LC platform with or without ID Tag Reader.

2) If you need any support on application, please contact us.

How to Choose Poroshell 120 Chemistry



Legend

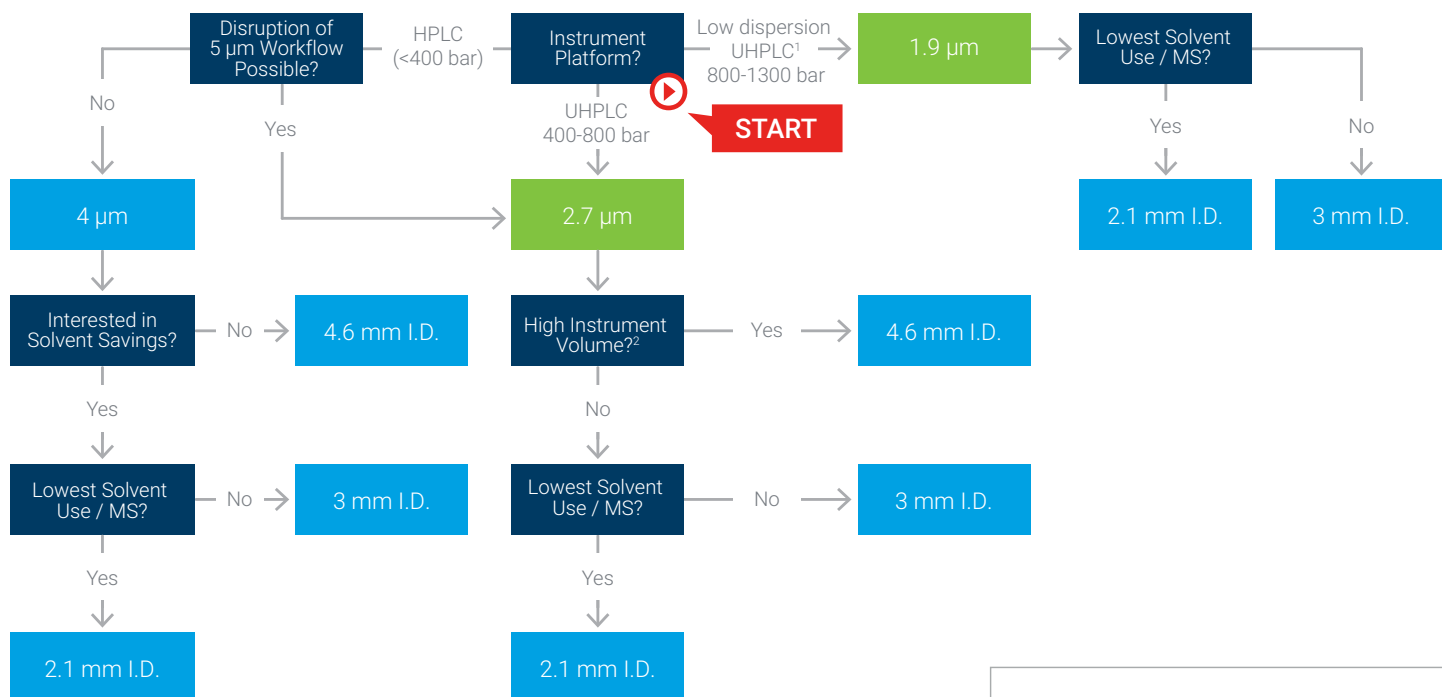
Decision

1st Choice

Alternative

¹ C8 phases have nearly identical selectivity compared to C18. Suitable for faster analysis times when sufficient resolution and retention is achieved.

How to Choose Particle Size and Dimension



Particle Size	I.D.	Optimum Flow
1.9 µm	2.1 mm	0.4 – 0.5 mL/min
	3.0 mm	0.8 – 1 mL/min
2.7 µm	2.1 mm	0.4 – 0.5 mL/min
	3.0 mm	0.8 – 1 mL/min
	4.6 mm	1.5 – 2 mL/min
4 µm	3.0 mm	0.5 – 0.75 mL/min
	4.6 mm	1 – 1.25 mL/min

Column length	I.D. Optimum Flow
50 mm	High speed
100 mm	High resolution
≥ 150 mm	Ultra-high resolution

Method Transferability Between Novel Poroshell 120 Columns and Traditional ZORBAX Columns

Traditional ZORBAX chemistries are aligned with InfinityLab Poroshell 120 chemistries to offer simplified method transfer from totally porous particles to superficially porous particle columns.

InfinityLab Poroshell 120 Chemistries		Aligned ZORBAX Chemistries
InfinityLab Poroshell 120 EC-C18		ZORBAX Eclipse Plus C18
InfinityLab Poroshell 120 EC-C8		ZORBAX Eclipse Plus C8
InfinityLab Poroshell 120 Phenyl-Hexyl		ZORBAX Eclipse Plus Phenyl-Hexyl
InfinityLab Poroshell 120 SB-C18	➔	ZORBAX StableBond SB-C18
InfinityLab Poroshell 120 SB-C8	➔	ZORBAX StableBond SB-C8
InfinityLab Poroshell 120 SB-Aq		ZORBAX StableBond SB-Aq
InfinityLab Poroshell 120 Bonus-RP		ZORBAX Bonus-RP
InfinityLab Poroshell 120 EC-CN		ZORBAX Eclipse XDB-CN
InfinityLab Poroshell 120 HILIC		ZORBAX HILIC-Plus

For more information on method transfer: Technical Overview [5990-6588EN](#)

Learn more:
www.agilent.com

This information is subject to change without notice.

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