

More Chemistries, More Choices For Solving Your Toughest Separation Challenges

The InfinityLab Poroshell 120 family has grown to include 3 particle sizes and 18 chemistries—including new phases for chiral and HILIC separations. So, you can efficiently separate the widest variety of compounds.



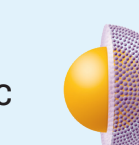
| InfinityLab Poroshell 120 | Chemistry | Particle Sizes | Pore Size | Temperature Limit | pH Range | Endcapped | Carbon Load | Surface Area | USP Designation | Benefits and Applications |
|---------------------------|-----------|----------------------|-----------|-------------------|----------|-------------|-------------|--------------|-----------------|--|
| EC-C18 | | 1.9 μm, 2.7 μm, 4 μm | 120 Å | 60 °C | 2.0–8.0 | Yes | 10% | 130 m2/g | L1 | General purpose Excellent peak shape and efficiency for acids, bases, and neutrals |
| EC-C8 | | 1.9 μm, 2.7 μm, 4 μm | 120 Å | 60 °C | 2.0–8.0 | Yes | 5% | 130 m2/g | L7 | General purpose Lower retention of hydrophobic analytes vs. C18 |
| SB-C18 | | 2.7 μm | 120 Å | 90 °C | 1.0–8.0 | No | 9% | 130 m2/g | L1 | Low pH Excellent stability and peak shape in highly acidic conditions |
| SB-C8 | | 2.7 μm | 120 Å | 80 °C | 1.0–8.0 | No | 5.5% | 130 m2/g | L7 | Low pH Excellent stability at low pH Lower retention of hydrophobic analytes vs. C18 |
| HPH-C18 | | 1.9 μm, 2.7 μm, 4 μm | 100 Å | 60 °C | 3.0–11.0 | Yes | Proprietary | 95 m2/g | L1 | High pH capable Robust performance and long lifetimes Improved retention, resolution, and peak shape of basic compounds |
| HPH-C8 | | 2.7 μm, 4 μm | 100 Å | 60 °C | 3.0–11.0 | Yes | Proprietary | 95 m2/g | L7 | High pH capable Robust performance and long lifetimes Lower retention of hydrophobic analytes vs. C18 |
| Bonus-RP | | 2.7 μm | 120 Å | 60 °C | 2.0–8.0 | Yes | 9.5% | 130 m2/g | L60 | Alternate selectivity to C18 Improved peak shape for basic compounds, stable in 100% aqueous conditions |
| PFP | | 1.9 μm, 2.7 μm, 4 μm | 120 Å | 60 °C | 2.0–8.0 | Yes | 5.1% | 130 m2/g | L43 | Alternate selectivity Excellent peak shape for polar and nonpolar analytes Unique selectivity for aromatic and halogenated compounds |
| Phenyl-Hexyl | | 1.9 μm, 2.7 μm, 4 μm | 120 Å | 60 °C | 2.0–8.0 | Yes | 9% | 130 m2/g | L11 | Alternate selectivity with aromatic groups Highly nonpolar bonded phase takes advantage of pi-pi interactions |
| SB-Aq | | 2.7 μm | 120 Å | 80 °C | 1.0–8.0 | No | Proprietary | 130 m2/g | L96 | Alternate selectivity Excellent peak shape and retention of polar compounds using reversed-phase LC Exceptional stability under high-aqueous conditions, including 100% water |
| EC-CN | | 2.7 μm | 120 Å | 60 °C | 2.0–8.0 | Yes | 3.5% | 130 m2/g | L10 | Alternate selectivity Use in reversed-phase for alternate selectivity of polar and mid-polar compounds Use in normal phase for excellent peak shape and retention of nonpolar analytes |
| HILIC-Z | | 2.7 μm | 100 Å | 80 °C | 3.0–11.0 | No | Proprietary | 95 m2/g | L114 | Polar analytes Excellent retention of highly polar or charged compounds by HILIC Rugged performance at high pH or high temperature |
| HILIC | | 1.9 μm, 2.7 μm, 4 μm | 120 Å | 60 °C | 0.0–8.0 | No | NA | 130 m2/g | L3 | Polar analytes Excellent retention of polar compounds by HILIC |
| HILIC-OH5 | | 2.7 μm | 120 Å | 45 °C | 1.0–7.0 | Proprietary | Proprietary | 130 m2/g | L86 | Polar analytes Fructan bonded phase offers alternate selectivity to other HILIC phases |
| Chiral-V | | 2.7 μm | 120 Å | 45 °C | 2.5–7.0 | Proprietary | Proprietary | 130 m2/g | L88 | Chiral separations Amines, profens, and complex basic and neutral compounds Reversed-phase, polar ionic normal phase, or polar organic modes |
| Chiral-T | | 2.7 μm | 120 Å | 45 °C | 2.5–7.0 | Proprietary | Proprietary | 130 m2/g | L63 | Chiral separations Beta blockers, hydroxyl acids, amino acids, profens, benzodiazepines, and hydantoin Reversed-phase, polar ionic normal phase, or polar organic modes |
| Chiral-CD | | 2.7 μm | 120 Å | 45 °C | 3.0–7.0 | Proprietary | Proprietary | 130 m2/g | L45 | Chiral separations Stimulants, fungicides, and protected amino acids Reversed phase or polar organic modes |
| Chiral-CF | | 2.7 μm | 120 Å | 45 °C | 3.0–7.0 | Proprietary | Proprietary | 130 m2/g | NA | Chiral separations Primary amines Polar organic or normal phase modes |

This information is subject to change without notice.
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Note: HILIC-OH5, and all four Chiral phases have a pressure limit of 400 bar.

Which particle is best for my method?

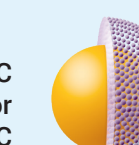
UHPLC



1.9 μm: Highest UHPLC performance

- Maximum pressure: 1300 bar
- Ideal for: Agilent 1290 Infinity II LC

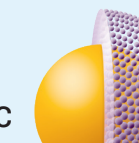
HPLC or UHPLC



2.7 μm: UHPLC performance at lower pressures

- Maximum pressure: 600 bar (unless otherwise noted)
- Ideal for: Agilent 1260 Infinity II LC or Agilent 1260 Infinity II Prime LC

HPLC



4 μm: Improved HPLC performance

- Maximum pressure: 600 bar
- Ideal for: Agilent 1220 Infinity II LC

1 bar = 14.5 PSI

| | | | | | | | | | | | | | | |
|-----|------|------|------|------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| psi | 1450 | 2900 | 4350 | 5800 | 7250 | 8700 | 10,150 | 11,600 | 13,050 | 14,500 | 15,950 | 17,400 | 18,850 | 20,300 |
| bar | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 |

What column ID and length should I choose?

| Format | Comment |
|---------------|--|
| Column ID | 4.6 mm for legacy methods 3.0 mm for lower solvent use than 4.6 mm 2.1 mm for lowest solvent use and MS applications |
| Column length | Shorter 30 to 100 mm for fastest separations Longer 150 to 250 mm for increased resolution |

Still using a legacy method?

InfinityLab Poroshell chemistries are aligned with traditional ZORBAX chemistries—making it easy to transfer your methods from fully porous to superficially porous particle columns.

| InfinityLab Poroshell Chemistry | Aligned Chemistry |
|--|----------------------------------|
| InfinityLab Poroshell 120 EC-C18 | ZORBAX Eclipse Plus C18 |
| InfinityLab Poroshell 120 EC-C8 | ZORBAX Eclipse Plus EC-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 Bonus-RP | ZORBAX Bonus-RP |
| InfinityLab Poroshell 120 SB-Aq | ZORBAX StableBond SB-Aq |
| InfinityLab Poroshell 120 EC-CN | ZORBAX Eclipse XDB-CN |
| InfinityLab Poroshell 120 HILIC | ZORBAX HILIC Plus |



Agilent InfinityLab is an optimized portfolio of LC instruments, columns, and supplies that work together seamlessly for maximum efficiency and performance—regardless of application area. More information at:

www.agilent.com/chem/infinitylab

For more information about InfinityLab Poroshell 120 Columns, go to www.agilent.com/chem/poroshell-120