

## Agilent ZORBAX Extend-C18 Column Specifications and Options

### ZORBAX Extend C18

Agilent ZORBAX Extend-C18 offers high efficiency and long life at high pH -- up to 11.5, as well as low pH, due to a unique bidentate bonding and double-endcapping. Extend-C18 is made by first bonding a dense monolayer of propylene-bridged bidentate-C18 silane stationary phase to special ZORBAX Rx-SIL. The bidentate-C18 bonded phase is then double endcapped using proprietary reagents and procedures to obtain maximum deactivation of the silica surface.

| Particle Size (µm)   | Length (mm) | ID   | Specifications  | Applications                                      | Method Development Notes   | Working with LC/MS  |
|--|-------------|--|---|---|--|---|
| Available in 1.8 µm sizes (both RRHD, stable to 1200 bar, and RRHT, stable to 600 bar)<br>3.5 µm<br>5 µm | 20 - 250    | 1.0<br>2.1<br>3.0<br>4.6<br>Prep<br>Custom options available | Double-endcapped<br>Pore size: 80Å<br>Surface area: 180 m <sup>2</sup> /g<br>pH: 2.0 - 11.5<br>Max temperature: 60 °C<br>Carbon load: 12.5% | basic drugs, alternative selectivity for peptides | Start with 5% methanol or acetonitrile in water as the initial solvent, and 100% methanol or acetonitrile as the final solvent. We recommend adding 0.1% formic acid (LC and LC/MS) or 0.1% TFA (LC) in both A and B bottles. This column can be used with 100% aqueous. For high pH applications, use 10 - 20 mM buffers such as borate buffer (pH 8 - 9), organic buffers (pH ~8 - 11), ammonium acetate (pH 8 -10). | If using LC/MS, we recommend starting with 5 - 10 mM ammonium formate, ammonium acetate, ammonium hydroxide, 0.1% acetic acid or 0.1% formic acid. We recommend against using ammonium bicarbonate. |