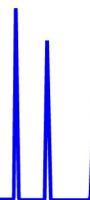




ZirChrom®

Technical Bulletin #171



... For Peak Performance

Why ZirChrom® Analytical HPLC columns?

pH Stability

- ZirChrom reversed-phase columns are stable from pH 1 to 14.
- pH ranges for ZirChrom ion exchange columns:

<i>ZirChrom® -WCX: pH 1 to 10</i>	<i>ZirChrom® -WAX: pH 3 to 9</i>
<i>ZirChrom® -SAX: pH 1 to 12</i>	<i>ZirChrom® -SHAX: pH 1 to 12</i>
<i>ZirChrom® -PEZ: pH 1 to 10</i>	

Temperature Stability

- ZirChrom® reversed-phase carbon columns are stable up to 200 °C.
- ZirChrom®-PS and ZirChrom®-PBD reversed phase columns are stable up to 150 °C.
- ZirChrom® ion exchange columns have temperature limits ranging from 50 to 80 °C.

 **Solvent Compatibility** - ZirChrom® columns have the stability of a polymer column without the problem of shrinking and swelling.

Unique Selectivity

- The unique surface chemistry of zirconia allows for mixed-mode retention of ionic analytes.
- ZirChrom®-CARB and Diamondbond®-C18 have radically different selectivities. The carbon layer on the particle surface provides high chromatographic selectivity for structurally similar compounds.

 **High Efficiency** - The efficiency of ZirChrom® phases greatly exceeds that of polymeric and is comparable to that of a typical silica C18 phase.

 **Longer Performance Lifetime** - The stability of the ZirChrom® phases ensures separation reproducibility.

