Stability Test Comparison
ZORBAX Eclipse XDB-C8 vs. Symmetry-C8

Application
Technical
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For certain separations it is either convenient or required that mobile phases of intermediate pH be used. Silica dissolution initiates at higher pH. Therefore, to develop chromatographic separations that are stable and reproducible, it is important to choose silica-based column packings with the longest possible lifetime. Through a combination of dense, durable particles, extra-dense bonding, and double endcapping, ZORBAX Eclipse packings (e.g., XDB-C8) have increased lifetime compared to Symmetry columns.

**Highlights**

- ZORBAX particle technology results in an extremely strong and dense silica support that dissolves more slowly at higher pH than xerogel particles used in Symmetry column packings.

- The extra dense bonding of ZORBAX XDB-C8 helps to shield the silica support at intermediate pH and decreases loss of chromatographic performance compared to Symmetry C8.

**Conditions:**
ZORBAX XDB-C8 (4.6x150mm) and Symmetry C8 (4.6x150mm)
Purge: 20:80, Methanol : 250 mM Na Phosphate, pH 7.0, 1.0 mL min., 60°C
Test: 60:40, ACN : 10 mM Sodium Phosphate, pH 7.0, 1.5 mL min., 40° C
Injection 5µL, Detect. UV (254 nm)