HPLC for Small Molecules

Ascentis® Express 2.7 Micron: *Four Benefits of Ascentis® Express*

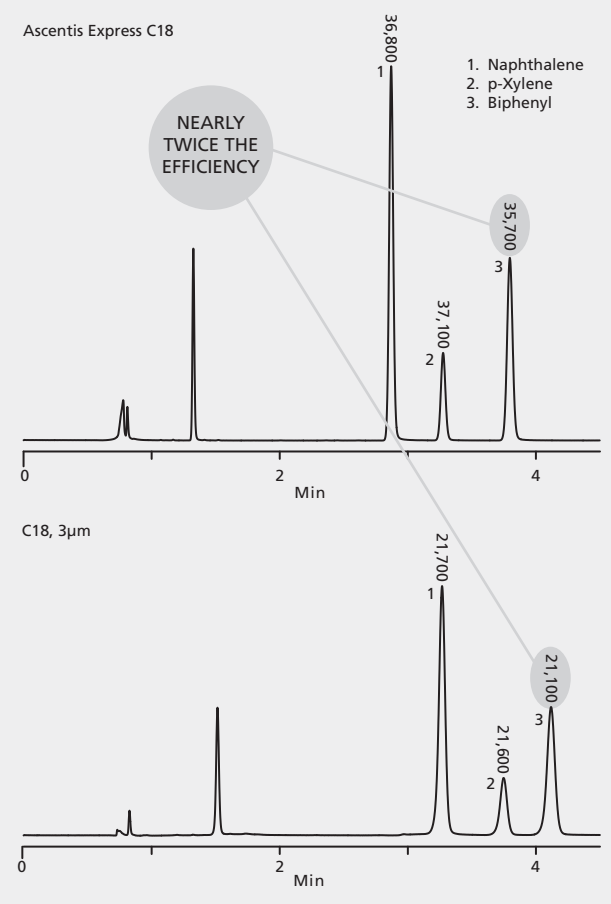
2. Double the Efficiency

- Short analyte diffusion path
- Longer columns permit doubling the plates over sub-2 µm particles
- Twice the efficiency of 3 µm particles

High Efficiency Resolution on Ascentis® Express Versus 3µm Particles

application for HPLC

column .. Ascentis Express C18, 15 cm × 4.6 mm I.D., 2.7 µm particles and C18, 15 cm × 4.6 mm I.D., 3 µm particles (53829-U)
mobile phase ..... 35:65 or 27.5:72.5, water:acetontrile
flow rate ..... 1.5 mL/min
column temp. ..... ambient
detector ..... UV at 220 nm
injection ..... 2 µL
Application No. G003979



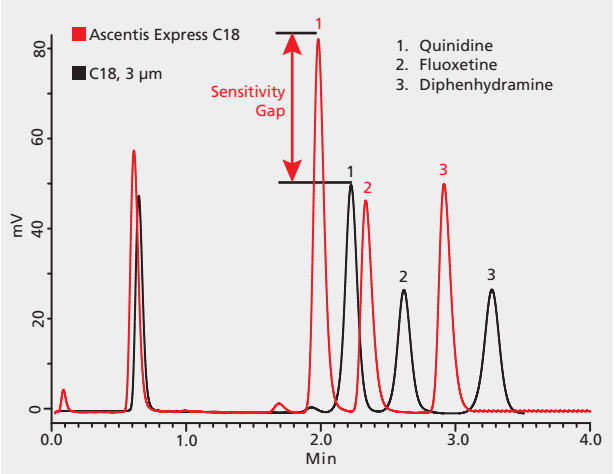
3. High sample loading capacity and signal/noise for trace analysis

- High sample loading from thick, porous shell layer
- High column efficiency for high S/N

HPLC Analysis Higher Efficiency of Ascentis® Express Compared to 3 µm Particles Gives Better Sensitivity on Ascentis® Express C18

application for HPLC

column .. Ascentis Express C18, 5 cm × 2.1 mm I.D., 2.7 µm particles and C18, 5 cm × 2.1 mm I.D., 3 µm particles (53822-U)
mobile phase ..... 35:0:65 or 35:4:61, 25 mM dibasic ammonium phosphate (pH 7.0):water: acetonitrile
flow rate ..... 0.2 mL/min
column temp. ..... 35 °C
detector ..... UV at 220 nm
injection ..... 1 µL
Application No. G003977



4. Extended column lifetime compared to both 3 µm and sub-2 µm columns

- Narrow particle size distributition allows use of 2 µm frits
- Dense particles for more stable bed